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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY  
MITCHELL BROS. COMPANY,  
(INCORPORATED.)

VOL. XI.

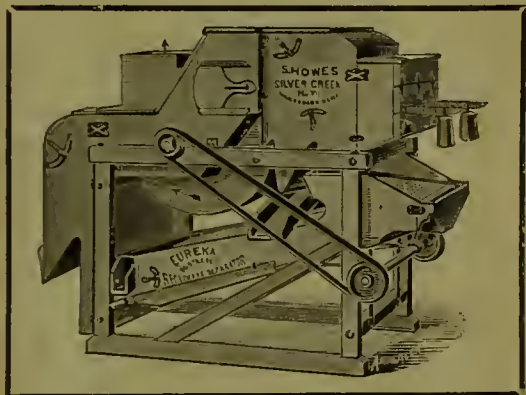
CHICAGO, ILLINOIS, JULY 15, 1892.

No. 1.

SUBSCRIPTION PRICE,  
ONE DOLLAR PER ANNUM.

## THE Eureka Grain-Cleaning Machinery

FOR ELEVATOR USE



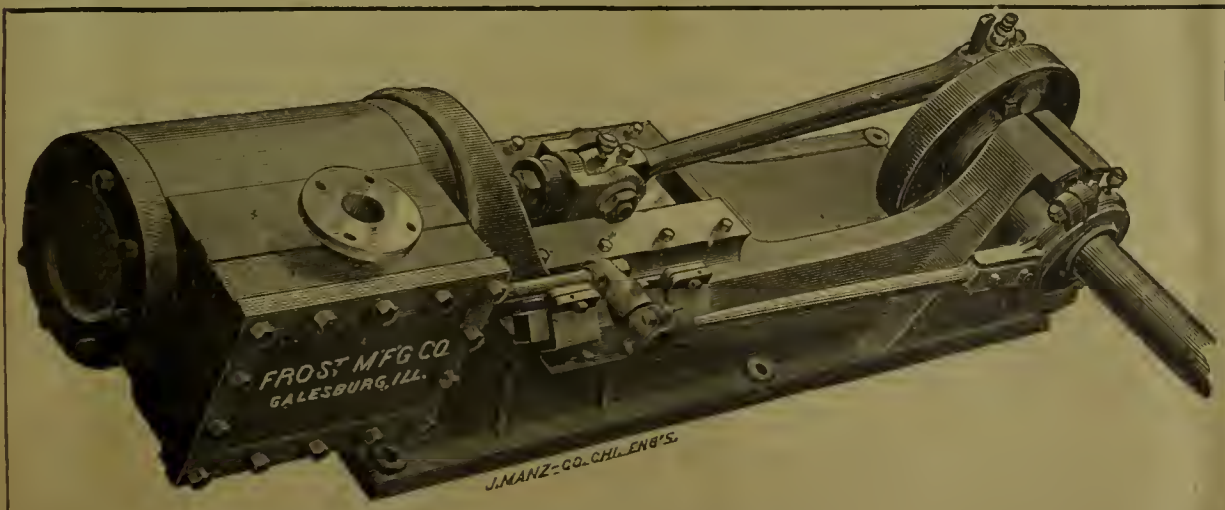
### COMPRISES

- The Eureka Warehouse and Elevator Separator.
- The Eureka Double Receiving Separator.
- The Eureka Single Receiving Separator.
- The Eureka Aspirating Separator.
- The Eureka Corn Sheller, Dustless.

For Circulars, prices, etc., address

**S. HOWES,** SOLE MANUFACTURER, SILVER CREEK, N. Y.

C O N V E Y O R S	<p>++ Elevator Buckets. ++ Elevator Boots. ++ Elevator Bolts. ++</p> <h2 style="margin: 0;">THORNBURGH MFG. COMPANY,</h2> <h3 style="margin: 0;">MILL AND ELEVATOR SUPPLIES</h3> <p style="margin: 0;">110 &amp; 112 SOUTH JEFFERSON STREET, CHICAGO, ILL.</p> <p style="margin: 0;">Elevating and Conveying Machinery a Specialty.</p> <p style="margin: 0;">++ PULLEYS. ++ SHAFTING. ++ HANGERS. ++</p>	B E L T I N G
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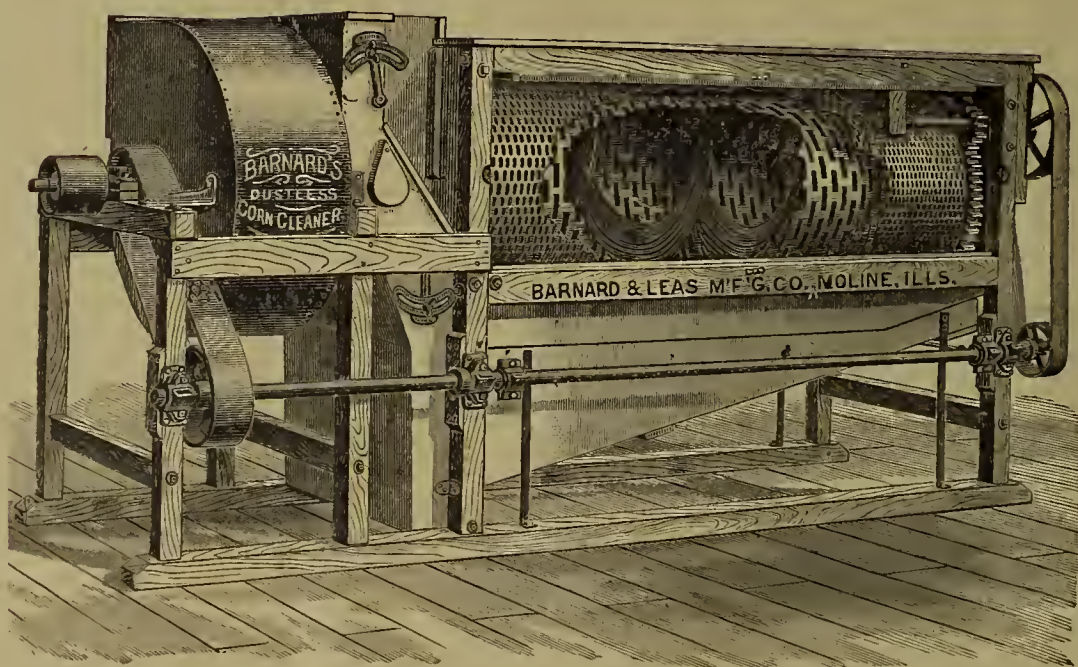
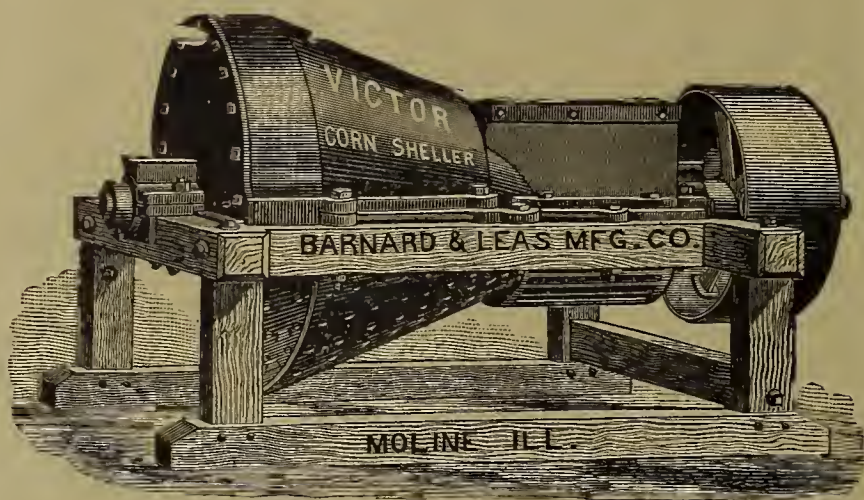


FOR PRICES AND DISCOUNTS  
— ON —  
**Elevator Machinery**  
AND SUPPLIES  
— OF —  
**EVERY DESCRIPTION,**  
ADDRESS EITHER STEAM OR HORSE-POWER,  
**The FROST MFG. CO.,**  
**GALESBURG, ILL.**



# HERE IS THE BEST

Corn Sheller and Cleaner on earth. Be sure and send your orders to Barnard & Leas Mfg. Co., and get the best.



MANUFACTURED ONLY BY

**BARNARD & LEAS MFG. CO.,**  
**MOLINE, - - - ILLINOIS.**

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1323 Capitol Avenue, DES MOINES, IOWA.

**R. C. STONE,** Springfield, Mo.

**STUART HARE,** Enterprise, Kan.

**J. M. ALLEN,** Lisbon, North Dakota.



# THE EXCELSIOR DUSTLESS

WATKINS & CO., COMMISSION GRAIN,  
Chamber of Commerce,

PEORIA, ILL., June 14, 1891.

GENTLEMEN:—We have clipped to this date something like 500 carloads of oats with the No. 6 "Excelsior" Combined Clipper and Polisher we bought of you at an expense of only a very few dollars for repairs to replace clipping wallowers. The machine has always been entirely satisfactory to us. We have never had a car of oats go off grade through any fault of the machine. We are buying a great many oats clipped by the "Excelsior" Clipper, and selling to same parties as those from your Clipper, and their oats have frequent claims made back on us.

Yours truly, WATKINS & CO.

BELLEVUE, IOWA, April 17, 1891.

GENTS:—Since purchasing our No. 5 Excelsior Combined Oat Clipper and Polisher of you in March, 1889, we have clipped and cleaned 150,000 bushels of oats, the loss in clipping averaging 6-10 of a pound per bushel, and we have always got the highest price for No. 2 grade oats, while we make no distinction as to quality in our purchasing, but all going to the same bin. This we consider one of the great advantages of a good Oat Clipper. We have always been well pleased with the machine. Repairs just purchased of you, amounting to \$15.00, is all we have had to pay.

Yours truly, REILING & CO.

HOLSTEIN, IOWA, April 10, 1891.

E. H. PEASE MFG. CO., Racine, Wis.

GENTLEMEN:—In regard to the No. 6 Excelsior Oat Clipper and Polisher, and Separator, I purchased of you last fall, I wish to say that it is highly satisfactory and surpasses my best expectations. I have polished about 150,000 bushels of barley with it, and it does this work very evenly, and does not break nor hull the grain. I am now running it on oats that test 28 pounds to the bushel, and raise them up to 33 and 34 pounds, with a shrinkage of not more than 3 ounces to the bushel.

I hesitated some before buying, but now that I know what it will do, I would not be without it for many times its value.

Yours respectfully, F. S. MANSON.

CHICAGO, ILL., Feb. 24, 1891.

DEAR SIR:

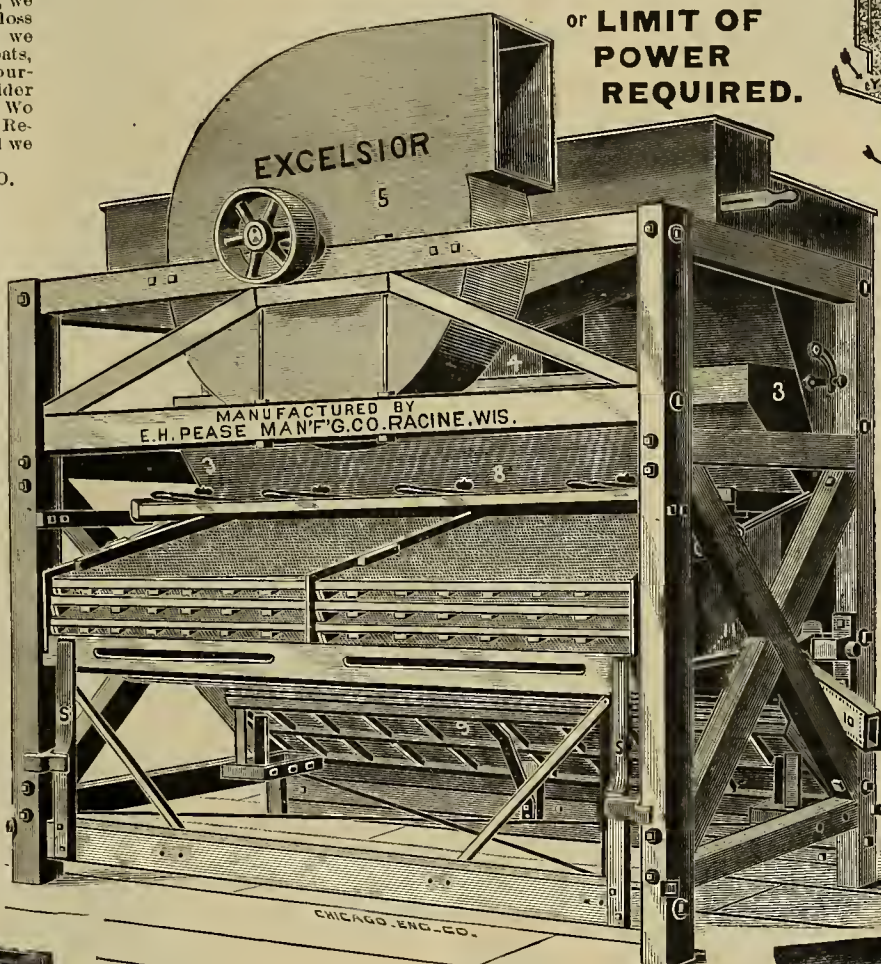
The two No. 8 Excelsior Jr. Oat Clippers we bought of you in June, 1890, are giving splendid satisfaction. We experience no difficulty in raising the weight of oats from 8 to 10 lbs. to the measured bushel. On the 12th inst. we run through the two machines a large lot of very foul No. 3 white oats, testing 27 pounds to the measured bushel, and raised them to a fine, bright quality of No. 2 oats, testing 37 pounds; shrinkage 500 pounds to 1,000 bushels. The shrinkage being largely "hulls," and being separated from the dust, can be utilized in making ground feed.

On the 18th inst. we run 4,500 bushels of oats through in 3 hours, and raised them from No. 3 white, testing 29 lbs., to No. 2, testing 38 lbs.

Yours truly,  
COLUMBIA ELEVATOR CO.,  
J. E. CAILEY, Sec'y.

## MACHINERY

HAS NO SUPERIOR IN POINTS OF  
CONSTRUCTION,  
DURABILITY,  
EXCELLENCE OF WORK,  
STILLNESS OF RUNNING,  
or LIMIT OF  
POWER  
REQUIRED.



### "Excelsior" Dustless Elevator Separator.

FOR ALL KINDS OF  
GRAIN OR SEEDS.

MADE IN 4 SIZES.

CAPACITIES, FROM 300 TO 2,000 BUSHELS PER HOUR.

HAS LARGE SIEVE SURFACE, POWERFUL  
FAN AND PERFECT VENTILATION.

GRAIN SHOE IS COUNTER-BALANCED BY  
COUNTER-BALANCE SPRINGS.

THE SMOOTHEST

—AND—  
LIGHTEST RUNNING SEPARATOR

IN THE MARKET.

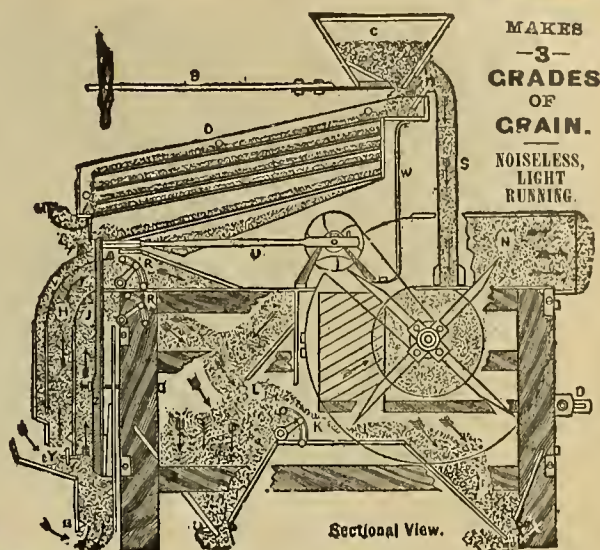
"ELEVATOR B."

LA CROSSE, WIS., Nov. 6, 1890.

GENTLEMEN:—Have just made a Test Run of Flax over the No. 2 Excelsior Receiver Separator of 775 bushels per hour without crowding. Of course, when flax is very dirty it would require more attention or slower feed. We are very much pleased with the machine on flax and timothy. It adds one-half to the capacity of our flax reels and of our timothy mills.

Yours respectfully, W. B. CLISBY,  
Foreman for W. W. CARGILL & BRO.

SEND FOR  
CATALOGUE  
AND  
PRICES  
—TO—



### "Excelsior" Dustless Separator and Grader

—FOR—

SEPARATING, CLEANING AND GRADING  
WHEAT FOR MILLING.

OR ANY KIND OF GRAIN FOR  
MERCHANTABLE PURPOSES.

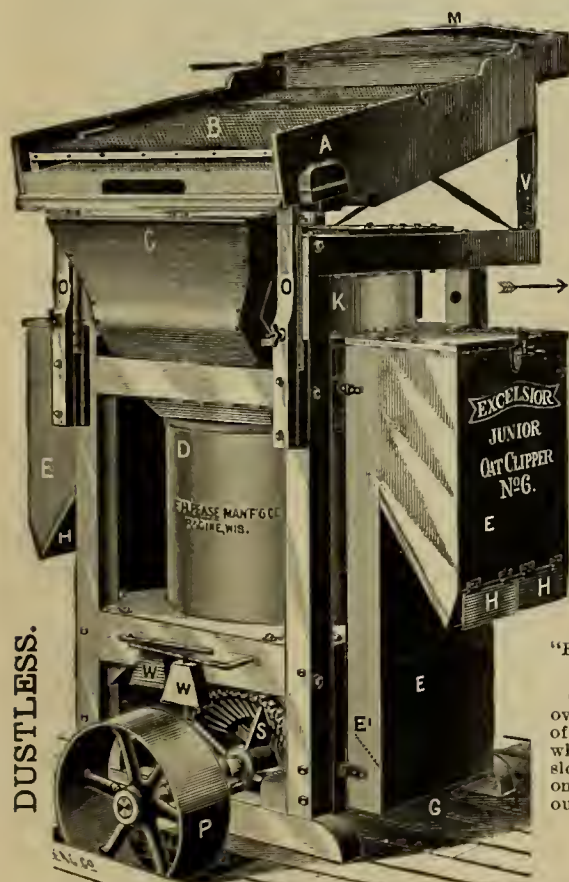
MADE IN 4 SIZES.

CAPACITIES, 150 TO 800 BUSHELS PER HOUR.

CEDAR RAPIDS, IA., Dec. 19, 1890.

GENTS:—The No. 8 EXCELSIOR OAT CLIPPER, SEPARATOR, GRADER AND POLISHER COMBINED, bought of you in January, 1890, is still doing business at the old stand, and giving as good satisfaction as ever. We are now using it to polish barley and it is giving good satisfaction.

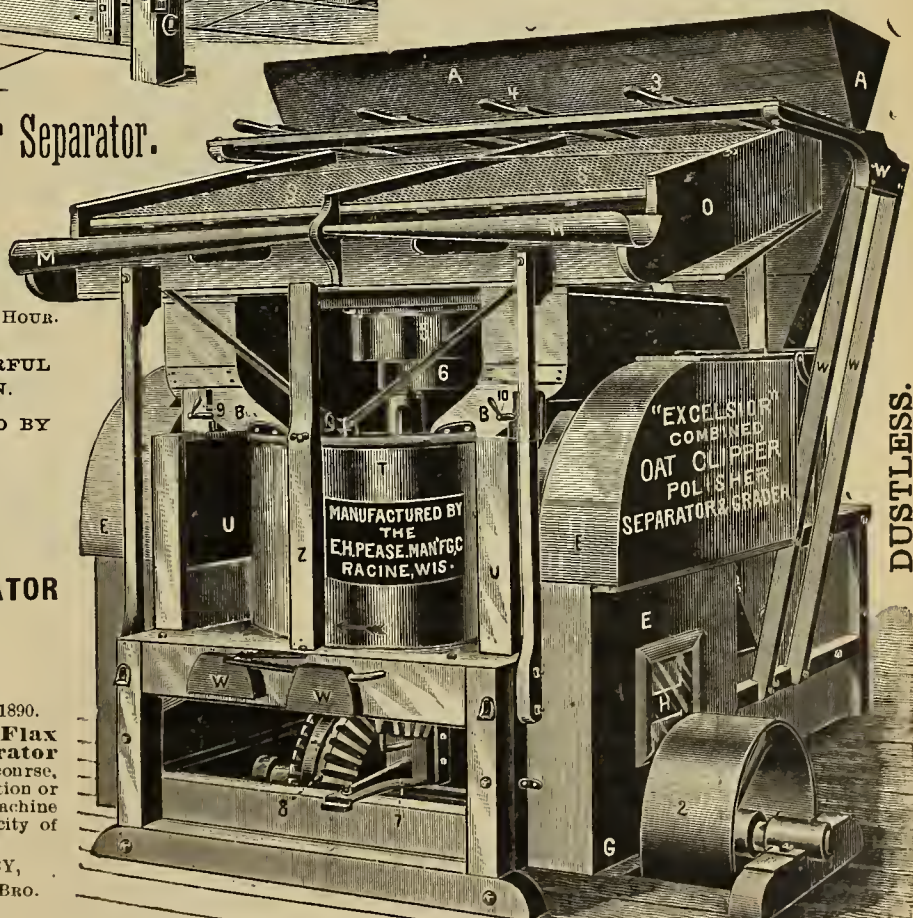
Yours truly,  
MINER & MORGAN.



"EXCELSIOR, JR." OAT CLIPPER, POLISHER and SEPARATOR  
FOR CLIPPING, POLISHING, SEPARATING AND  
CLEANING OATS.

OR MAY BE FURNISHED WITH SIEVING, ETC.,  
FOR POLISHING, CLEANING, SEPARATING AND  
GRADING WHEAT OR BARLEY.

MADE IN 2 SIZES. CAPACITIES, 250 TO 600 BUSHELS PER HOUR.



"EXCELSIOR" OAT CLIPPER, SEPARATOR AND GRADER COMBINED;

ALSO POLISHER, SEPARATOR AND GRADER COMBINED.

THIS "COMBINED" MACHINE May be fitted to fill any or all the capacities of a GENERAL DUST-LESS ELEVATOR RECEIVING SEPARATOR for all kinds of Grain; OR AS A CLIPPER, CLEANER, POLISHER, SEPARATOR and GRADER OF OATS. OR AS A POLISHER, SEPARATOR, CLEANER and GRADER of Wheat and Barley.

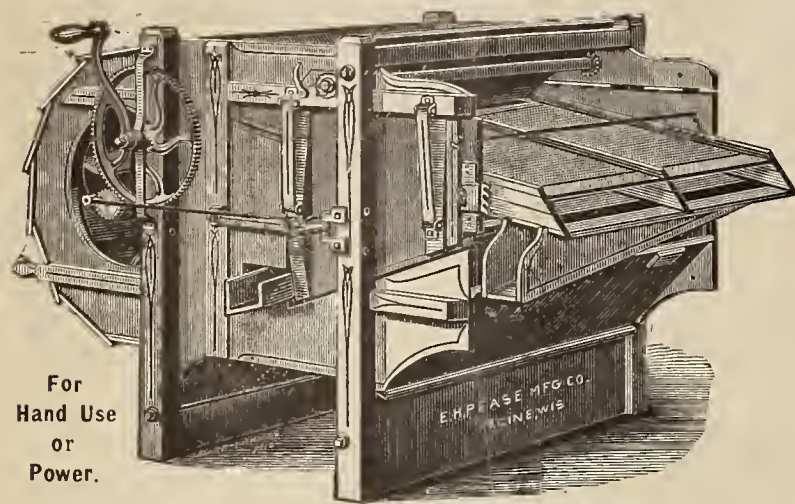
MADE IN 3 SIZES, WITH CAPACITIES FROM 150 TO 750 BUSHELS PER HOUR.

# E. H. PEASE MFG. CO., RACINE, WIS., U. S. A.

SEE PAGES 2, 3, 4, 5.



# PEASE WAREHOUSE FANNING MILLS.



For  
Hand Use  
or  
Power.

## The "Pease" Side Shake Mills.

The Cut shows the "Right," or Crank side. On the opposite side are tight and loose Pulleys. These mills are not only a first-class mill for general work but are also specially adapted for all kinds of seed cleaning as is attested by the following unsolicited letter, which we publish by permission:

E. H. PEASE MFG. CO., Racine, Wis.:

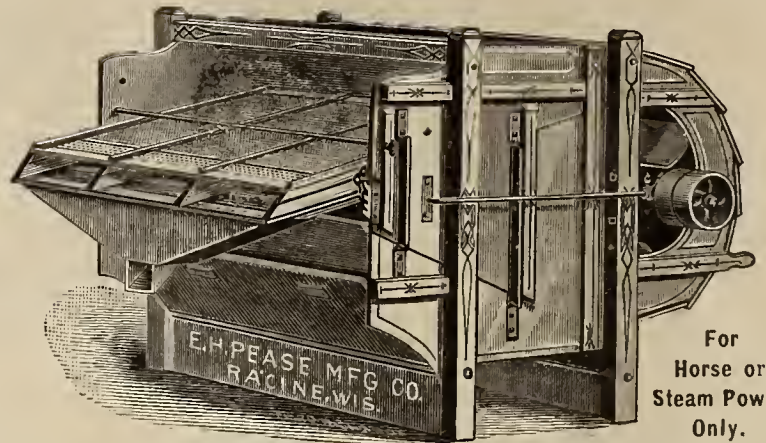
Gentlemen:—We have started the No. 2 Mill which we bought from you a short time ago. We find it to be the best Timothy Cleaner we ever saw. It cleans very fast and does fine work. It is far ahead of the — mill for cleaning timothy. We also use a — mill, but it does not come up to the No. 2 side shake we bought of you. Your No. 2 will clean timothy about three times as fast as the — mill does, and does better work than the — does. Your mill is well built and strong. We would not give our No. 2 "Pease" Side Shake for any two — that we ever saw. Very truly,

J. B. ZECHES & CO.

NOTE—The No. 0 machine is not fitted to run by hand power.

	No. 3.	No. 2.	No. 1.	No. 0.
Extreme Height.....	3 ft. 6 in.	3 ft. 6 in.	3 ft. 6 in.	3 ft. 6 in.
Size over all.....	5 ft 2 in. x 3 ft 4 in.	5 ft. 2 in. x 4 ft.	5 ft 2 in x 4 ft 9 in	5 ft 2 in x 5 ft 9 in
Floor to center of pulley.....	25½ in.	25½ in.	25½ in.	25½ in.
Driving pulley.....	6 in. x 2 in.	6 in. x 2 in.	6 in. x 2 in.	6 in. x 3 in.
Revolutions per minute.....	275	275	275	275
Size of hurdles.....	2 ft. 6 in. x 24 in.	3 ft. 2 in. x 24 in.	4 ft. x 24 in.	5 ft. x 24 in.
Capacity per hour.....	100 to 200 bu.	125 to 250 bu.	175 to 350 bu.	250 to 450 bu.

HAVE  
THE  
LARGEST  
SALES  
OF  
ANY  
MADE  
IN  
THE  
UNITED  
STATES



For  
Horse or  
Steam Power  
Only.

## The "Pease" End Shake Mills.

Particularly adapted for use in Horse Power Elevators where power is limited and close cleaning and grading desired. It is strong, durable and noiseless.

The shoe is supported by STEEL springs, hung from above and vibrated by flexible shake-rods with ADJUSTABLE ECCENTRICS. The shake is from front to back, instead of from side to side.

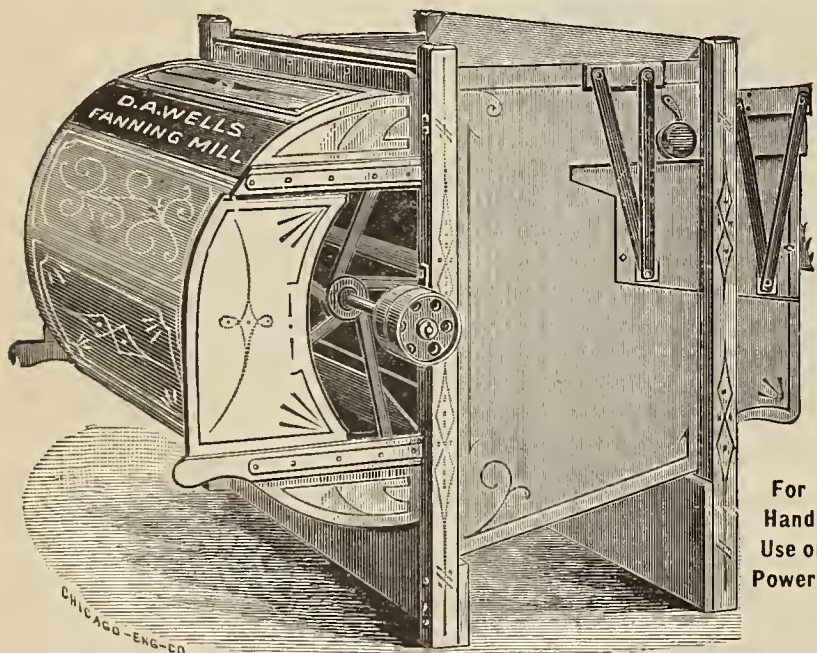
They are fitted with a patent adjustable hopper raiser, not shown in cut, which gives an even flow of grain upon the sieves.

These Mills have MUCH GREATER CAPACITY than any other kind of equal sizes. They are especially adapted for cleaning ALL KINDS OF GRAIN. The side shake Mills are better adapted for cleaning Clover, Timothy, Flax, etc.

NOTE—The pulleys are placed on the RIGHT side of mills or opposite to those showing in this cut, unless otherwise ordered.

	No. 3.	No. 2.	No. 1.	No. 0.	No. 00
Extreme Height.....	3 ft. 6 in.	3 ft. 6 in.	3 ft. 6 in.	3 ft. 6 in.	3 ft. 6 in.
Size over all.....	5 ft. 9 in. x 3 ft. 3 in.	5 ft. 9 in. x 5 ft. 9 in.	5 ft. 9 in. x 5 ft. 9 in.	5 ft. 9 in. x 5 ft. 9 in.	5 ft. 9 in. x 5 ft. 9 in.
Floor to center of pulley.....	25½ in.	25½ in.	25½ in.	25½ in.	25½ in.
Driving pulleys.....	6 in. x 2 in.	6 in. x 2 in.	6 in. x 2 in.	6 in. x 2 in.	6 in. x 3 in.
Revolutions per minute.....	450	450	450	450	450
Size of hurdle.....	2 ft. 6 in. x 30 in.	3 ft. 2 in. x 30 in.	4 ft. x 30 in.	5 ft. x 30 in.	6 ft. x 30 in.
Capacity per hour.....	125 to 250 bu	150 to 300 bu	200 to 400 bu	250 to 500 bu	300 to 600 bu

THESE MACHINES CAN BE FURNISHED WITH SPECIAL SIEVING TO HANDLE ANY KIND OF GRAIN OR SEEDS.



For  
Hand Use or  
Power.

## The "D. A. Wells" Warehouse Fanning Mill. WARRANTED

To clean CORN or OATS at the rate of 800 to 1,000 bushels per hour with the equal of ONE MAN POWER. Sold SUBJECT TO TRIAL. SATISFACTION GUARANTEED!

Designed for locations where power is limited and rapid cleaning is more of an object than close grading.

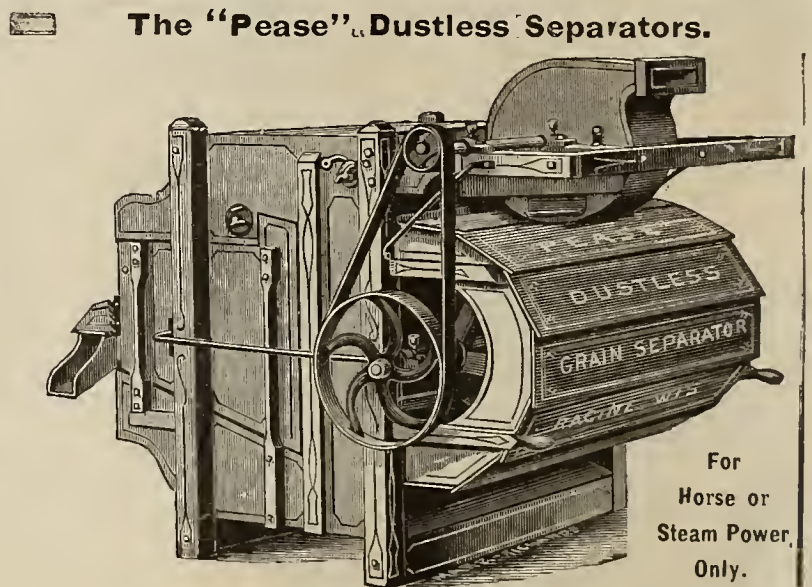
They have a much larger capacity than our "Pease" Warehouse Mills, but having a larger fan, do not require as high a motion and consequently require less power.

These mills are famous as corn and oat cleaners, where plain elevator work is required, and to be done rapidly.

The sieves are so arranged that they may be put in place or taken out independently, thus enabling the operator to quickly arrange any combination that may be required for the various kinds or conditions of grain to be cleaned.

Extreme height.	Size over all.	Floor to center of pulley.	Driving pulleys.	Rev. per minute.	Size of sieves.	Capacity per hour on corn or oats.	Weight.
4 ft. 1 in.	5 ft 6 in x 6 ft.	2 ft. 3 in.	6 in x 2 in	140	57 in. x 26 in.	800 to 1,000 bu.	425 lbs.

WE  
ARE  
HEADQUARTERS  
FOR  
ALL KINDS OF  
MOTIVE POWER  
MACHINERY,  
FITTINGS,  
SUPPLIES AND  
REPAIRS  
FOR  
GRAIN  
ELEVATORS,  
AND  
MILLS.  
—O—  
SEND FOR  
GENERAL  
CATALOGUE  
AND PRICES  
—TO—



For  
Horse or  
Steam Power,  
Only.

## The "Pease" Dustless Separators.

CHICAGO, ILL., April 8, 1891.

GENTLEMEN:—The "Pease" Dustless Separator I bought of you March 26, 1891, I sold to Wittman & Co., 66 and 68 N. Halsted St. The No. 00 Machine I bought of you January 19, 1891, I sold to F. Grimsell, 80 W. Erie St., and one I bought of you some time ago I sold to Keiuef Bros., North Ave. and Halsted St. These and several others of these "Pease" Dustless Separators I have bought of you are being used chiefly for cleaning corn and oats, and any of them will clean as fast as 8x5-inch buckets, placed 12 inches apart and running at the usual speed, can elevate.

All the machines are giving good satisfaction.  
Yours, etc.,

R. D. HILDRETH, Millwright,  
53 and 55 So. Jefferson St.

SPIRIT LAKE, IOWA, May, 7, 1891.

GENTLEMEN:—Inclosed find draft to pay for the No. 00 "Pease" Dustless Separator just received from you to take the place of the — Separator. Day before yesterday we put the mill in place, and have been running it on some odd jobs, and the Separator works to our entire satisfaction. The Dustless Fan and Conductor works splendidly, carrying out everything I want it to, and I can put the suction on strong enough to take out grain if I desired. I can regulate the machine just as I want to, and am just more than pleased with it.  
Yours truly,  
D. L. RILEY.

	No. 3.	No. 2.	No. 1.	No. 0.	No. 00.
Extreme Height.....	5 ft. 2 in.	5 ft. 2 in.	5 ft. 2 in.	5 ft. 3 in.	5 ft. 7 in.
Size over all.....	5 ft 9 in. x 3 ft 5 in.	5 ft 9 in. x 4 ft 5 in.	5 ft 9 in. x 5 ft 3 in.	5 ft 9 in. x 6 ft 3 in.	5 ft 9 in. x 9 ft 3 in.
Height to where grain enters.....	4 ft. 3 in.	4 ft. 3 in.	4 ft. 3 in.	4 ft. 3 in.	4 ft. 3 in.
Floor to center of pulley.....	2 ft. 3 in.	2 ft. 3 in.	2 ft. 3 in.	2 ft. 3 in.	2 ft. 3 in.
Driving pulleys.....	6 in. x 3 in.	6 in. x 3 in.	6 in. x 3 in.	6 in. x 4 in.	6 in. x 4 in.
Revolutions per minute.....	450	450	450	450	450
Size of hurdles.....	2 ft. 6 in. x 30 in.	3 ft. 2 in. x 30 in.	4 ft. x 30 in.	5 ft. x 30 in.	6 ft. x 30 in.
Capacity per hour.....	125 to 250 bu	150 to 300 bu	200 to 400 bu	250 to 400 bu	300 to 600 bu

# E. H. PEASE MFG. CO., RACINE, WIS., U. S. A.

SEE PAGES 1, 3, 4, 5.



# THE MOST SUCCESSFUL FLAX CLEANERS IN THE WORLD!

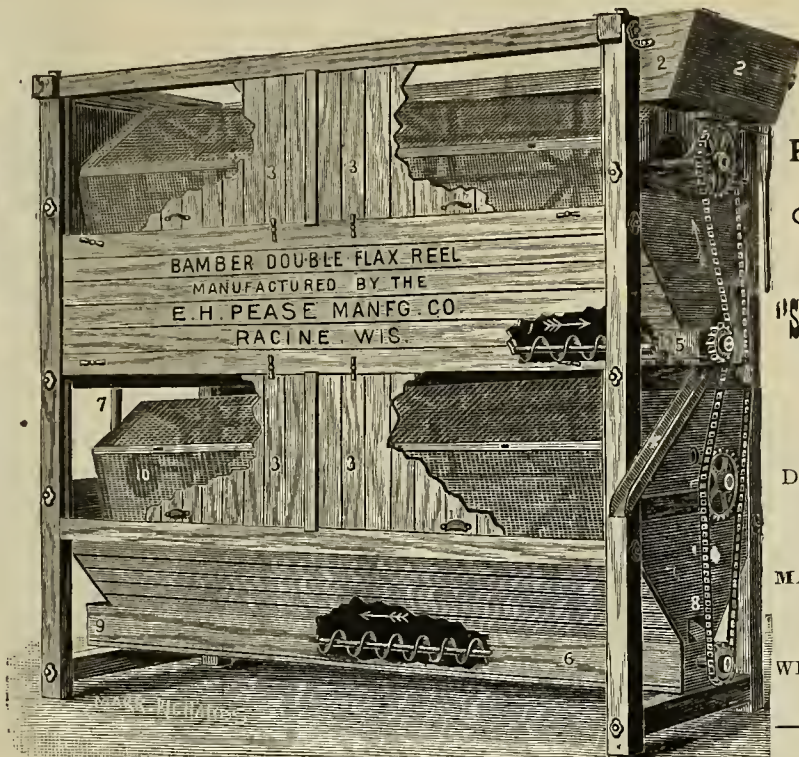
FLAX,  
TIMOTHY AND CLOVER  
CLEANING.

Dear Sirs:—We are using one of your No. 2 EXCELSIOR Dustless Elevator Separators (see page 317 of this paper) as a "scalper" for Flax, and easily run 750 bushels per hour through it. Much of the flax is thus reduced below six per cent. and run directly to our shipping bins. We also have one of your QUADRU-  
PLE Flax Reeling Machines with which we clean rough flax down to two and one-half per cent. at the rate of 300 bushels per hour. We always overcrowd the reels so as to increase their capacity and thus run some flax into the "tailings" which we reclean at our leisure. Of course we should not waste any flax into the tailings and would reduce the flax to better per cent. if we did not crowd the "Feed" on our reels so hard. We consider the outfit hard to beat. We also use the Separator to scalp timothy and clover, thereby DOUBLING the capacity of our seed cleaners.

Yours truly,  
W. B. CLISBY, Foreman,  
W. W. CARGILL & BROS.,  
Elevator "B"

LA CROSSE, WIS.,  
Aug. 31, 1891.

STRAIGHT OR TAPERED  
HAND REELS OF ANY DIMENSIONS  
DESIRED, MADE TO ORDER.



MADE  
WITH  
ONE,  
TWO or  
FOUR

REELS  
IN A  
CHEST  
AND  
with or without

"SCALPING-SHOE"

REELS  
OF ANY  
DESIRED STYLE  
OR  
DIMENSIONS  
MADE TO ORDER.

WRITE FOR  
PARTICULARS.

Two feet of capacity length for each lineal foot of machine.

Tapered, Hexagon Reels. Revolving on Horizontal Shafts.

All Sprocket Wheels and Drive Chain run perpendicular and parallel with each other.

The lightest running, best made, most durable reels in the market.

Can "Clothe" them with { "BLACK" OR "TINNED" WIRE-CLOTH,  
PERFORATED ZINC, OR  
PERFORATED SHEET STEEL.

HOW IS THIS?

A FIVE YEARS' RECORD!

MINNEAPOLIS, MINN., Nov. 28, '91.

GENTLEMEN:—The QUADRU-  
PLE FLAX REELING MA-  
CHINE you shipped us here for  
ELEVATOR "K" belonging to E.  
P. Bacon of Milwaukee has been  
running in good shape a month,  
and is giving perfect satisfaction.

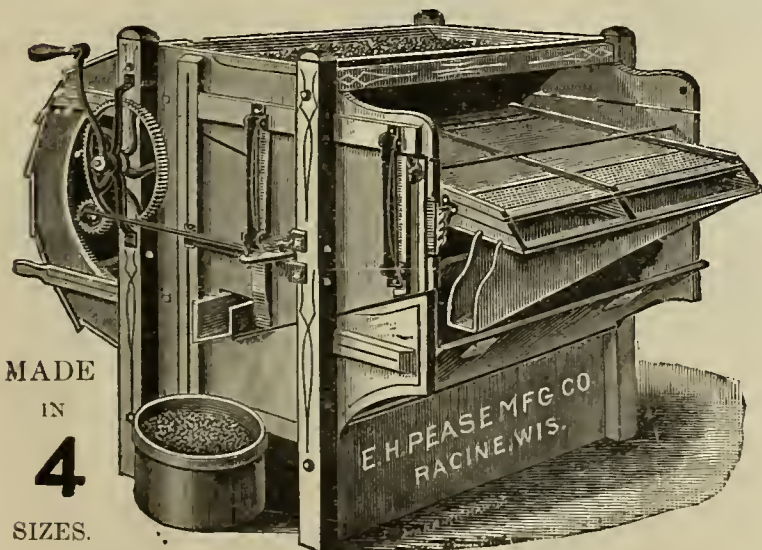
We also have one of your ma-  
chines of same style and size that  
has been running in this cleaning  
house about five years, which we  
like equally as well.

With either machine, WE CLEAN  
ROUGH FLAX DOWN TO ONE  
PER CENT. at the rate of 175  
BUSHELS PER HOUR.

Have never seen another as per-  
fect machine for RAPID AND  
PERFECT FLAX CLEANING.  
It is a pleasure to recommend your  
machines, as they are perfect and  
require little power or attention.

Yours truly,  
E. G. TERWILLIGER,  
Supt. Elevator "K."

OUR "PEASE" SPECIAL FLAX MILLS  
—ARE—  
FAMOUS FLAX CLEANERS  
FOR SEED FLAX, OR COMMERCIAL CLEANING.  
FOR COUNTRY GRAIN HOUSES.



MADE  
IN  
4  
SIZES.

FOR HAND USE OR POWER.

This mill is represented with a Grain Hurdle in the Shoe, to show that although especially adapted to Flax Seed Cleaning, it can also be used for all kinds of Grain, making it a universal mill, calculated for all kinds of work. This mill is built upon the same principle as our Side Shake Warehouse Mills, but with more depth of the shoe, in order to accommodate deeper sieves, and a flax screen extending to the extreme front of the mill, a length of four feet. It consequently has greater capacity than any ordinary mill in existence. No flax hurdles are used, as separate sieves work better on flax seed, and afford opportunities for changing the combinations for different classes of work. This mill is equally well adapted to cleaning, separating and screening Timothy, Clover, and other fine seeds.

## LOOK HERE!

THIS IS ONLY A PARTIAL LIST OF

## LARGE FLAX HANDLERS

WHO HAVE ADOPTED AND ARE EACH

USING FROM ONE TO SIX OF OUR FLAX REELING MACHINES,

—VIZ:—

ALBERT DICKINSON SEED CO.,  
MINNESOTA ELE. CO., (Armour & Co.),  
CHAS. COUNSELMAN & CO.,  
W. L. LUCE (South Elmhurst Elevator),

CHICAGO.

E. P. BACON & CO., MILWAUKEE.

MINNEAPOLIS:

INTER-STATE GRAIN CO.  
E. P. BACON, ELEVATOR "K".  
STRONG & MILLER.  
EMPIRE ELEVATOR CO.  
BAGLEY ELEVATOR "X".

WINONA MILL CO., Mankato, Minn.  
NESS & MOEN, Peterson, Minn.  
INTER-STATE GRAIN CO., Oelwein, Iowa.  
SAMUELSON & CO., Stromsburg, Neb.  
J. C. SANBORN & SON, Ortonville, Minn.  
W. H. STIPP, State Center, Iowa.  
GRAY, BABCOCK & SEARS, Ida Grove, Iowa.  
S. J. CLAUSEN, Clear Lake, Iowa.  
THOS. KOLTIS & CO., Radcliffe, Iowa.  
D. C. FAIRBANKS, Dodge Center, Minn.  
J. E. KNUDSON, Mason City, Iowa.  
BARLOW & LAWRENCE, Thornton, Iowa.  
MITCHELL BROS., Manley, Iowa,  
AND MANY OTHERS.

## E. H. PEASE MFG. CO., RACINE, WIS., U. S. A.

SEE PAGES 1, 2, 4, 5.



# THE MOST SUCCESSFUL

## MOTIVE POWER EVER INVENTED

### FOR COUNTRY GRAIN ELEVATORS

HERE YOU HAVE IT  
IN A "NUTSHELL".

E. H. Pease Mfg. Co.

DEAR SIR:—We have given The Seven Complete Outfits (7 Morton Powers and 7 outfits of Elevating Machinery), bought of you this season, a six weeks' trial and find them all perfectly satisfactory. I consider the Morton Tread Power superior to any other in use. We have taken in at a single house as high as 3,750 bushels per day and used two 900 lb. horses to do the work, and at the same time loaded out 6 large car loads

Yours truly,  
WINONA MILL CO.,  
Per W. F. PARKER,  
Auditor and Builder.

WINONA, MINN., Oct. 24, 1891.

Above Company now (4-8-92) have 9 of these Powers.

WE ARE . . .

SOLE  
GENERAL AGENTS

FOR  
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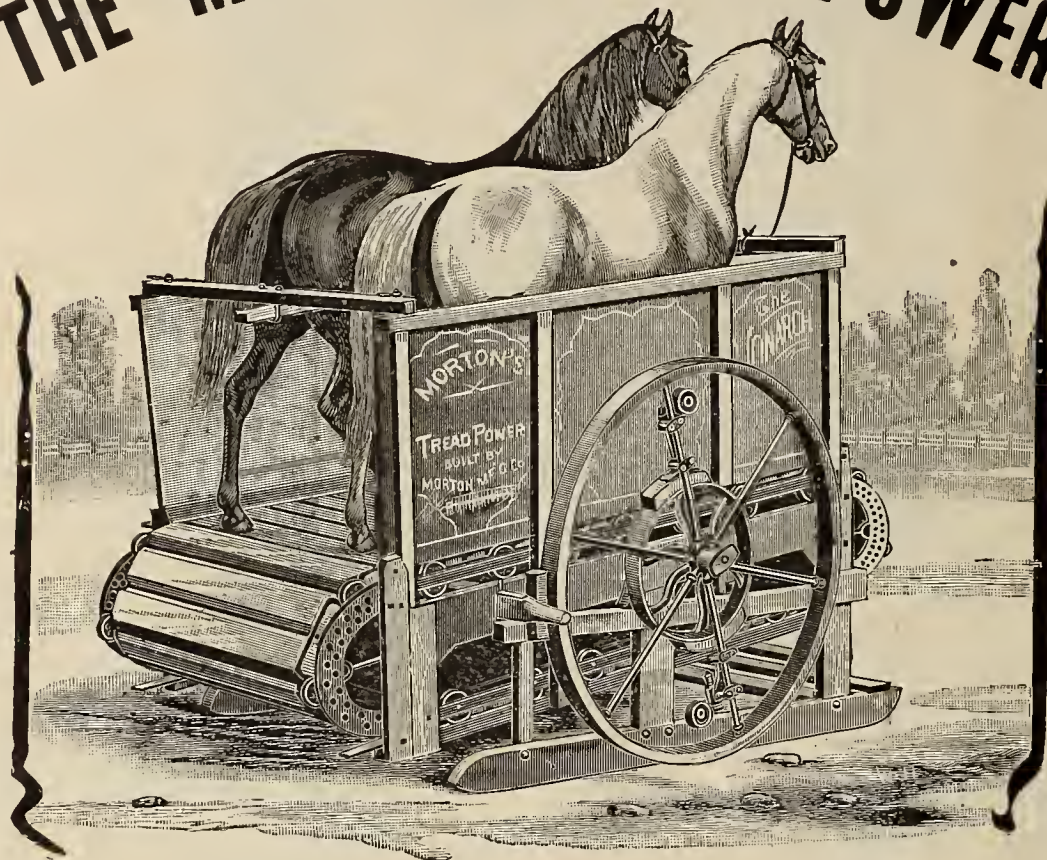
ALL LETTERS AND ORDERS

TO

E. H. PEASE MFG. CO., Racine, Wis., UNITED STATES.

SEE PAGES 1 2, 3, 5.

## THE MORTON TREAD POWER



DESIGNED EXPRESSLY FOR GRAIN ELEVATORS.

Style No. 3. For 1, 2 and 3 Horses.

Speed of Main Shaft, 90 to 100 per Minute.

For houses where not more than one, two or three horse power is required, these powers are beyond controversy more economical and satisfactory motors for grain elevators than any steam or gas engine or other horse powers in the world.

THEY ARE THE MOST SUCCESSFUL  
BECAUSE

THEY ARE WARRANTED to give as steady motion to the grain elevating machinery, or to grain cleaning machinery as any steam or gas engine of same rated horse power.

They are always ready for business at a moment's notice. There is no fire to build; no steam to get up; no engincer or driver required; no dangers from combustible fuels of any kind; no increased insurance rates; no fire risks.

Our Patent Automatic Governor is furnished with every Morton Power sold without extra charge, and can be regulated to run the power slower or faster in a moment's time. Should a belt "fly off" when power is operating at full speed and work, there will be no change of speed and no damage to power or horses.

IT IS THE ONLY POWER

having an adjustable "elevation" (on which the horses walk) which is an important point of superiority, viz: By the mere turning of a crank, the operator can, at will, give more or less "pitch" to the elevation, thereby developing more or less power as work in hand requires, or lower same to a horizontal position to rest or feed the horses. This can be done when the horses are either on or off the power, without in any way effecting the "line" or the tension of the drive belt. It is the only Tread Power whose revolving platform (on which the horses walk) has a genuine cog-gear driving connection, with gears on either end of drive shaft, the "cogs" of which each consist of an anti-friction (and anti-wear) roller. It is the only Power having self-oiling traverse wheels and has 50 per cent. less traverse wheels and other wearing points, than any other tread power, and consequently is the most free, light running and steady Horse-Power in the market.

This machine needs no attention (except occasional oiling), and can be stopped or started by a rope, having one end connected with brake-lever, and other end at most convenient place in office or grain elevator. The entire expense of this power when delivered, set up, connected and covered with suitable building, will not cost the purchaser any more than the cheapest "Sweep" Power and is vastly superior. SEE? It does not require one-quarter as large house as a "Sweep" Power.

HERE YOU ARE AGAIN!

E. H. Pease Mfg. Co.

DEAR SIR:—I am using a Morton Tread Power, Style No. 3, Two-Horse, bought of you a year ago, and am running my stand of elevators which is 34 ft. high, with 5x8 in. buckets, placed 12 in. apart on link-belt, with a 1,050 lb. horse and it has given me better satisfaction than I expected when I bought it. I can do more work than any claim the manufacturers have ever made for it. I can elevate 740 bushels of oats, or 500 bushels corn per hour, with one horse.

Yours truly,  
J. W. STROMBERG.

ROSCOE, IA., Oct. 26, 1891.

HERE IS A PARTIAL  
LIST OF

Recent Purchasers  
FOR REFERENCE.

Winona Mill Co., Winona, Minn.,  
(9 machines).  
M. D. Stevers & Co., Chicago.  
C. W. McNoun, Burrton, Kan.  
Barnard & Leas Mfg. Co., Moline, Ill.  
Frost Mfg. Co., (many Powers),  
Galesburg, Ill.  
Russell & Miller, Winneconne, Wis.  
O. L. Marfield & Co., (many Powers),  
Winona, Minn.  
Porter Milling Co., Winona, Minn.  
Bingham Bros., (many Powers),  
New Ulm, Minn.  
A. McMichael, Bryant, So. Dak.  
A. F. Bornsche'n, Brandon, Wis.  
P. H. White, Credit River, Minn.  
B. F. Uplinger, Kingston, Ill.  
York Foundry and Eng. Co.,  
York, Neb., (many Powers).  
J. A. Campbell & Son, Lincoln, Neb.  
Geo. Zion, Yarmouth, Ia.  
E. Burt, Shannon, Ill.  
A. Thorp, Flag, Ill.  
Turner & Brenner, Marshall, Minn.  
Fawcett Bros., Tacoma, Wash.  
Peterson & Smith, Olds, Ia.  
J. A. Carton & Co., Ackley, Ia.  
McLaughlin & Son, Austin, Minn.  
L. H. Neff, Groton, So. Dak.  
Bender Bros. & Co., Spencer, Ia.  
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FOR THE  
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GEARS, SPROCKETS, SET COLLARS,  
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"FLEXIBLE" AND "SWIVEL" GRAIN SPOUTS,  
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**Farm and Warehouse Fanning Mills,**  
GRAIN TESTERS, SEED TESTERS,  
PERFORATED METALS, WIRE CLOTH,  
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CORN SHELLERS, STEAM ENGINES, FLAX REELS  
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"SWEEP" AND "TREAD" HORSE POWERS,  
BAG-TRUCKS, SIX-WHEEL WAREHOUSE TRUCKS, ETC.

## GAS ENGINES OR STEAM

Capacity, 50 bushels per hour.

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E. H. PEASE MFG. CO. RACINE WIS.

HERCULES  
STEEL SCOOP  
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Grain and Seed Testing Scale.

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SEE WHAT YOU  
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We have got it.

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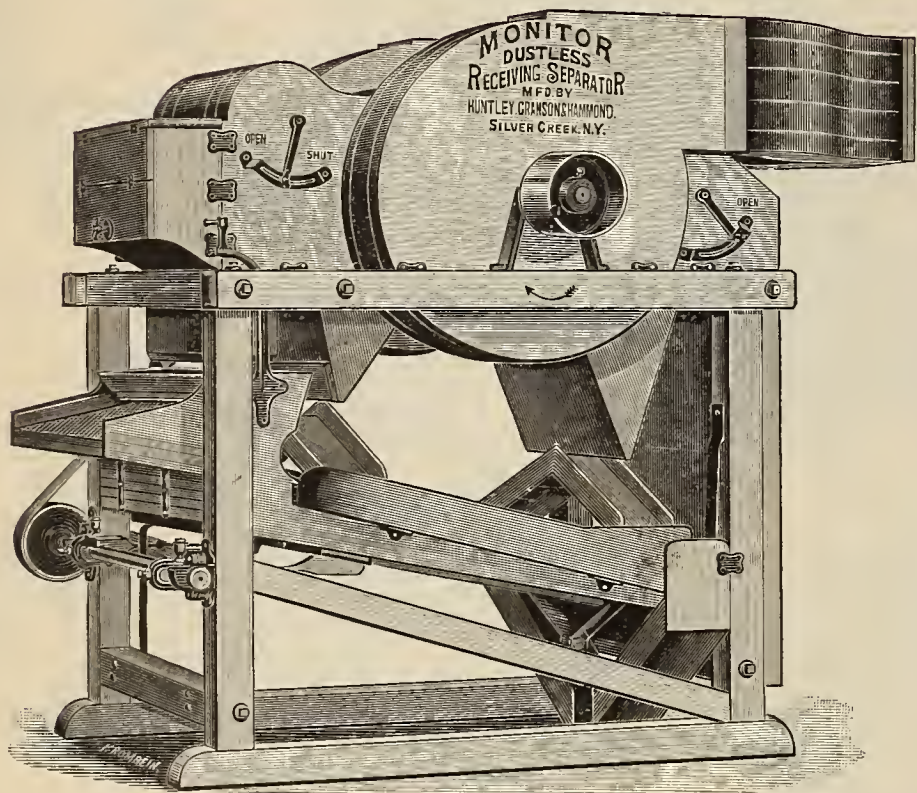
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Powerful Puller  
ON EARTH.**

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Cars at once on  
STRAIGHT  
and LEVEL  
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and pro-rata on  
GRADES  
and  
CURVES

"HERCULES" POWER CAR PULLER.

SEE PAGES 1, 2, 3, 4.





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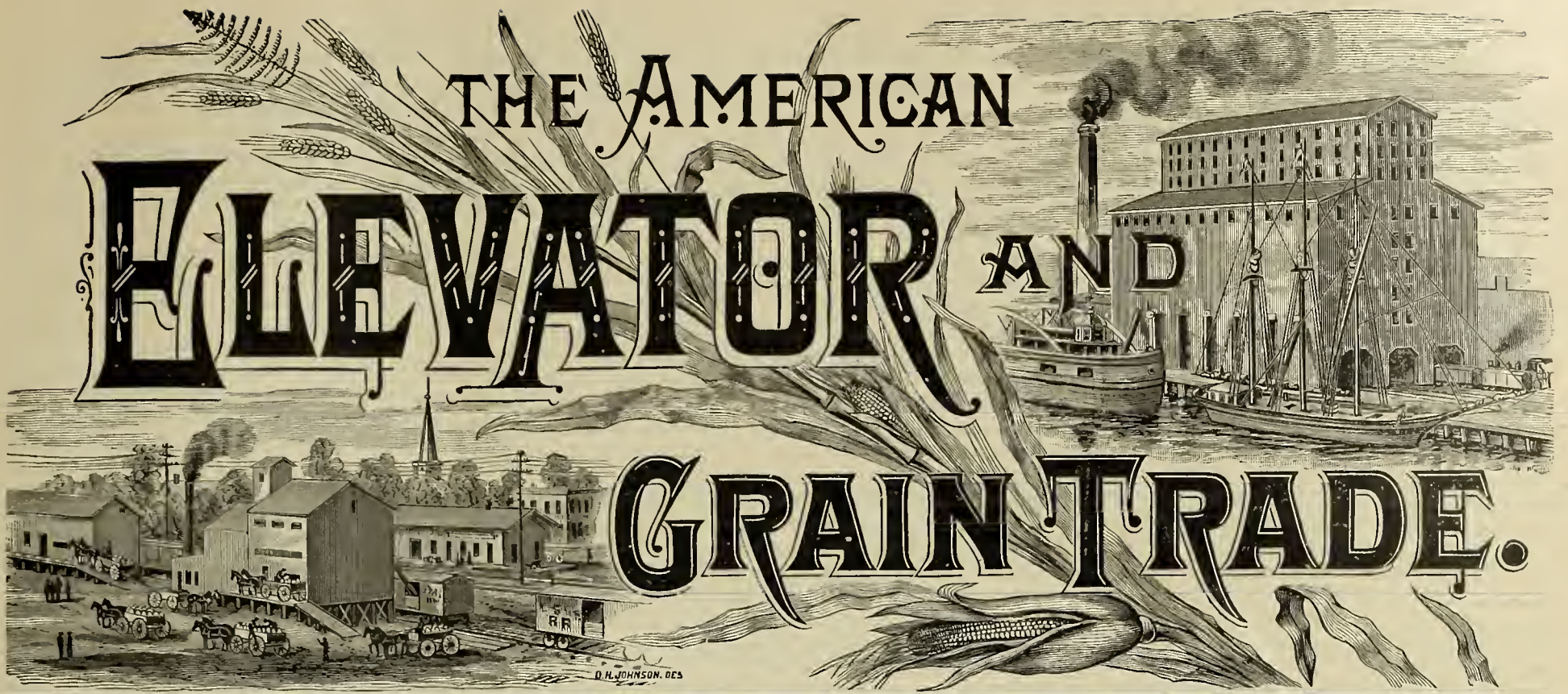
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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY  
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(INCORPORATED.)

VOL. XI.

CHICAGO, ILLINOIS, JULY 15, 1892.

No. 1.

SUBSCRIPTION PRICE,  
ONE DOLLAR PER ANNUM.

## TRANSFERRING GRAIN AT CHICAGO.

In the last issue of the AMERICAN ELEVATOR AND GRAIN TRADE we published an account of the facilities for transferring grain at a number of prominent railroad terminals, and gave an illustration showing how grain is supposed to be transferred by shoveling it from a car on a high track to a car on a lower track. In the illustration it was not shown that any grain was being spilled on the ground, and the traffic managers of roads using this ancient method will maintain that every bit of the grain is put in the car of the receiving road although it is quite the contrary. As will be seen by referring to the illustration, the wind has no chance to blow grain away while being shoveled from one car to another, neither is grain ever made wet by rain, snow or sleet falling into the uncovered trough connecting the cars. We are sorry to say that, although Chicago has a grain receivers' association, carriers are still permitted to transfer grain by this primitive method. However, few do so, except at times when they are pushed for cars.

Chicago's grain transferring facilities include not only the best and latest improved transfer houses, but also the oldest, simplest and poorest method known, that of shoveling from car to car on the level. The Chicago storage elevators charge three-fourths of one cent per bushel for transferring grain, but do not transfer much.

The Baltimore & Ohio Railroad Company has a regular transfer elevator where grain, bran, screenings, etc., can be transferred without waste, dockage or damage by storms, and where correct weights can be obtained. The Cleveland, Cincinnati, Chicago & St. Louis Railway, usually called the "Big Four," has no transfer elevator, no transfer cars, nor even a high and low track. Its facilities are farther behind the times than any other road taking grain from Chicago. It pays men the magnificent sum of \$1.35 to shovel a load of grain from car of Western road to its car. A small load is paid for at the same rate as a large load. It takes two men half a day to transfer a car load, as cars are usually loaded, and they very seldom try to transfer more than two cars a day. The company's transfer tracks are not very extensive, and coal, brick and other commodities are transferred there by hand as well as grain. This transfer service is far from being efficient. Cars are not always well cleaned for receiving the grain and the grain is not swept

out of the car from which it is transferred as it should be. Frequently much grain is spilled on the ground and blown away by the wind. The track room is so small and the method of transferring requires so much time that frequently grain must be greatly delayed. Instead of striving to transfer grain efficiently, economically and expeditiously the officials of this road seem to be opposed to such service. The Grain Shippers' Association could easily convince the officials of their error and should be requested to do so.

The Chicago & Erie Railroad Company has two Jumbo transfer elevators for transferring grain at Fifty-first street and the tracks. It also has high and low tracks as

we had called attention to the steal the car was removed, but the wholesale stealing continues. A member of our staff recently visited this transfer yard and found much grain spilled on the ground, and at different points; nearby was a sack of grain. The sacks were thus scattered about either to prevent their attracting attention or to assist each thief in distinguishing his plunder. When first entering the transfer yard the sliding door at the hopper end of the transfer car was open about a foot, and inside was one man filling a grain sack. He may have had an assistant and they may have been filling the sack with wind, but as he was lifting the sack only to let it fall as one does when trying to crowd a little more grain in a sack it seems evident that he was filling the sacks from the hopper. In each car from which all the grain was supposed to have been taken was from two to five bushels of grain. It must not be supposed that this grain will be permitted to remain in the car and be hauled away, for it will not. Each car is afterward swept out and this grain stolen under the name of "sweepings." These Jumbos were numbers 4 and 8. The scales of No. 4 were very dull and far from what a grain weigher would call sensitive.

The Chicago & Eastern Illinois Railroad has no transfer elevator, but transfers all grain and bran by shoveling from high to low track. All weighing is done on track scales which are far from reliable and worse than useless.

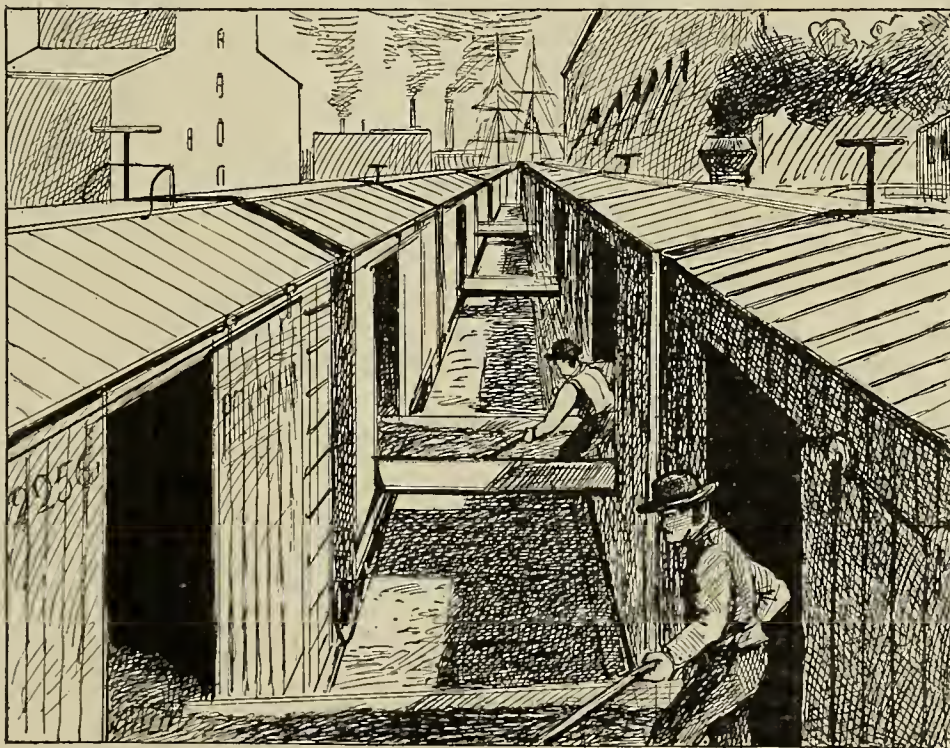
The Pittsburg, Ft. Wayne & Chicago Railroad Company has "Grain Transfer Car No. 1," at Forty-seventh street and its tracks, which can transfer 30 to 35 cars per day of 10 hours. It is used to transfer bran, but no effort is made to weigh the bran in it. The car of bran is weighed and the stencil weight marked on car deducted. The stencil weight as

all who have had anything to do with weighing cars know, is most always correct when marked upon a car. The great trouble is that the empty car is not weighed and marked every morning.

The Chicago & Grand Trunk Railway has a tall transfer elevator which has a transferring capacity of 100 cars per day. This is a pretty good house, but is an old one. Some improvements have been made since its erection. Bran is weighed on track scales.

The Louisville, New Albany & Chicago has no transfer elevator, but has a high and low track for transferring grain and bran. Weights are secured on track scales.

The Lake Shore & Michigan Southern Railway has two Jumbo transfer cars for transferring grain at Englewood. When shipments are numerous and the road has



THE BIG FOUR'S GRAIN TRANSFERRING FACILITIES.

illustrated in the June issue. These tracks are used principally for transferring bran and when the grain to be transferred is in excess of the transferring capacity of the two transfer cars it is weighed on track scales and shoveled from car on high track to car on lower track. The transfer cars of this road can transfer about fifty carloads of grain per day of ten hours. It is sometime necessary to make two drafts of a large car of oats, which increases the chance for error in weighing and recording weights. More grain is stolen while being transferred to the cars of this road than at any other point visited by our representative in this city. At one time the employees of the transfer car kept a small flat car on same track with transfer car, and most every afternoon it was loaded with well filled grain sacks. After



more grain to transfer than the transfer cars can handle the grain is weighed on track scales, and shoveled from car on high track to car on low track, the same as bran.

The Pittsburg, Cincinnati, Chicago & St. Louis Railway, known as the Panhandle, has a Jumbo transfer car at Hoyne avenue and its tracks. This car is No. 26,024. Its hopper scale is claimed to be of 80,000 pounds' capacity. At one time it was able to transfer thirty-five cars per day of ten hours, but its engine, boiler and machinery are in such poor condition that it can hardly transfer twenty-five cars per day of ten hours. It has two elevators, and the buckets of each leg are 7x24, placed 14 inches apart. The knife blades of the scale in this car have been broken by car being switched about the crowded yard. Complaints of dull blades have been made not infrequently by the weighman in charge. When visited this car was in poor condition, several of the supporting rods in the hopper were badly bent, and others were broken. Seven men are employed in operating this car. This car is not used to transfer bran as much is lost in the transferring, but screenings can be transferred without much loss. The man in charge of this car said that cars of Eastern roads were examined and placed in good condition before being loaded. When cars loaded with grain were leaking when received at transfer yard they were reported in "Bad Order." The car was not working the day visited because no empties were at hand to receive the grain. The scale hopper of this car is supposed to be wedged up off of the scale knives every evening so as to prevent dulling of the knives by bumping of the cars during the night. This road also has a transfer car at Washington Heights.

The Michigan Central Railway has a tall transfer elevator for grain and a high and low track for bran which is weighed on track scales. Here the worthless stencil weights again figure to the disadvantage of the shipper, carrier and receiver. This transfer house can transfer 100 cars per day of ten hours. It is claimed the most serious defect of the high transfer elevator with scales in the upper story is that correct weight can not be secured when the wind is blowing, as the house is so light as to be easily swayed to and fro. To obtain correct weights scales should be on the ground floor and be set upon a stone foundation.

The Wabash Railway has no transfer elevator but transfers all grain, bran, etc., by shoveling from car on high to car on low track at Chandler. All loads are weighed upon unreliable track scales.

The New York, Chicago & St. Louis Railway, known as the Nickel Plate, has a first-class transfer elevator with a capacity for transferring ten cars per hour. It transfers bran and flax as well as grain and screenings, and its hopper scale weights are reliable. Many a carload of grain has been damaged by having other kinds of grain mixed with it while being transferred by a Jumbo transfer car; especially is this the case with flaxseed. At the Nickel Plate elevator all of the grain is transferred to the East bound car. None is left in the bin to be mixed with the next carload. It is the kind of a transfer elevator every Eastern road should provide for handling its grain shipments. Correct and reliable weights with honest and complete transfer are advantages shippers do not overlook, and carriers will advance their own interest by providing such.

### OUR RYE EXPORTS.

One of the curiosities of the year is the rye export, which from July 1, 1891, to May 31, 1892, was 11,424,719 bushels; with an export value of 87 cents per bushel, against 322,912 bushels for the same time the previous year. It shows the large aggregate of mysterious supplies that come in right under the stimulus of an active demand at a high price. By comparison, the price per bushel in 1890-91 was 72 cents. In this country rye is so overwhelmingly overmatched by other cereals that it is only when an unexpected supply turns up that its real importance is noticed. Its low price in years of normal crops in Europe is, of course, the reason why general attention is not given to its culture, but as our last crop was sown before the European shortage was fully recognized, it is a puzzle how we came to have so much to spare, or what we have done with the surplus in former years, when there was almost no foreign demand.

Fire insurance managers are said to be considering the advisability of refusing corn elevator bins in view of the heavy rains and indications of a very short crop.

### WEIGHING GRAIN AT MINNEAPOLIS.

C. M. Reese, Minnesota state weighmaster, in his annual report to the Railroad and Warehouse Commission just published devotes considerable space to shortages and carelessness of country shippers in loading. He says: Notwithstanding our efforts, shortages do occur. Shortages, although seldom on cars weighed by us from elevators in this city and again into mills here, do take place. (Some of these shortages are of a very mysterious character, others can be traced to leaking of cars, wrong spouting at the elevators, transposition of car numbers, stealing, and dropping of grain through scale hopper before weighed.) These mistakes are not committed by the employes of the state, but are the results of accidents, and sometimes carelessness on the part of the employes of elevators and mills. We constantly admonish these to exercise the utmost caution, as to a certain degree the correctness of our work is dependent upon their action. Again, shortages are frequently reported by commission men acting for country shippers, but investigation has demonstrated that the great majority of these complaints are unjustifiable. It is an apparent fact, that as stated before, the shortages of cars shipped from elevators to the mills are few and far between. They hold up so close in weight that the average shortage on grain thus weighed out of elevators and into mills in this city, is from seven to thirty-five pounds per car, and as the weighing of cars from the country is done in the same manner and by the same men, the result should be and must be the same. (Shippers from the country frequently put a card in the car containing the weight of the contents of same, and we often find that they weigh considerable more than the amount claimed.) In several instances overages exceeding five thousand pounds have been found; this is an indication of the unreliability of primary or country weighing. In this connection I will say that shortages are always reported, while shippers invariably keep quiet about overages.

I drafted a bill and caused the same to be introduced in the last legislature, "providing for the appointment of one or more scale experts whose duty it should be to travel about the state, examine and correct scales in primary elevators, together with their respective modes of handling grain," but the lawmakers of that session did not see fit to pass the same.

Often when a shortage is reported on a car and it is practicable to do so, we weigh up the whole bin in an elevator into which the grain has been put, and invariably do we find that such bin is a few pounds short of what it ought to contain; this is conclusive proof that the house has not received more than the weighing calls for.

By examining the books of an elevator company owning a large number of country elevators, I find that at some stations the weights will be just about even with ours; at some they will overrun, and at others they will be short. This is another indication that there is something wrong about the scales in the country; besides this their cars are unloaded at nearly every place in our system during the season and it would be impossible for our weights to be wrong at all of them.

We have a first class scale expert connected with our department and we find that this is an absolute necessity, for scales very frequently need an overhauling, and by having such an expert always out in the various places where we weigh, we feel assured that the scales we operate are correct, and at the present time we operate on about one hundred and eighty (180) scales of large capacity. A great many of these scales have a patent scale registering device attached to them. It is an automatic machine, and if handled with reasonable care cannot fail to be correct. It serves as a check, and we have found it very valuable in cases where errors have been committed by the weighers in putting down their figures. We often find that cars have been badly coopered in the country, which is liable to cause leakage while in transit. We also find that they don't sweep the cars properly. Shippers should bear in mind that cars must be well swept and coopered before they are sent out on the road. Cars having been loaded with coal or oil must be well cleaned, for the millers are very particular in not wanting coal dust or oily wheat to get into their mills.

Continuing on the subject of shortages, I cannot refrain from alluding to what I consider one cause of actual shortage, and that is, stealing out of railroad cars while on the tracks in this city, and perhaps while in transit. The railroad yards of this city are very extensive and

especially so in the outskirts where police protection on the part of the city is very meager, and where there is none on the part of the railroad company. Complaints are frequent on cars loaded and unloaded from places in or near the center of the city, which fact of itself goes to support the theory of extensive stealing from cars standing way out beyond patrol limits, and as a matter of fact cars sometimes remain in these yards for a week or more before they are unloaded, giving ample opportunity for plundering by parties desiring to do so. I know positively that large amounts of grain are being stolen from cars, and this is especially true in the fall and winter when idle men and boys make use of the long evenings and nights to pursue their nefarious business. Grain thus procured is constantly being sold to flour and feed dealers in this city who handle large quantities of it. A great deal of this grain sold to dealers is taken from the cars in broad daylight by men and boys carrying with them brooms, sacks and ladders, representing themselves as sweepers of empty cars, but I am well aware that they don't confine themselves to empty cars alone.

I desire right here to reiterate the recommendation made in my former reports, that the railroad companies should exercise more vigilance in excluding from their yards these parties who make a livelihood by plundering shippers, and to furnish better police protection. The Chicago, Milwaukee & St. Paul Railroad Company is the only one to my knowledge in this city that has police protection in its yards, and the result is indeed very apparent. I have done all in my power to put a stop to this evil, and will continue to do so, and to accomplish this in some degree, I drafted and had introduced in the last legislature, a bill "to prohibit loitering in and about railroad yards." The bill met with the same fate as the one above alluded to—it didn't pass. I have also written letters to the managers of all railroads centering in this city, as well as to the Chamber of Commerce, Grain Receivers' Association, and to the mayor of this city, setting forth these evils and asking co operation to suppress them. They have all responded favorably, but it yet remains to be seen what will be done. This stealing should be stopped, not only because of the loss to shippers and receivers, but also of its becoming detrimental to this great grain market, and of the odium it is likely to throw upon this state weighing system.

Cars arrive at their places of unloading, not only with seals broken, but in many instances with doors wide open. This is due to the fact that samplers representing various firms who handle this grain, open them for the purpose of procuring samples, and then sometimes fail to close the car doors.

We have no system for resealing. In this connection I would recommend that a system of sampling be established, either by the state or Chamber of Commerce, which shall provide for a resealing of the cars as soon as the same have been inspected and sampled.

### EXPORTS OF CORN.

Our exports of corn in May were 2,810,614 bushels to the United Kingdom, 1,113,406 to Germany, 1,638,424 to other countries in Europe, 145,221 to Canada, 139,346 to Mexico, 57,130 to Cuba, compared with 888,856 bushels to the United Kingdom, 151,786 to Germany, 175,886 to other countries in Europe, 585,738 to Canada, 8,648 to Mexico and 24,842 to Cuba, in May last year.

During the ten months ending with May we exported to the United Kingdom 34,775,468 bushels of corn; to Germany, 13,386,366; to other countries in Europe, 18,874,976; to Canada, 3,311,010; to Mexico, 578,119; to Cuba, 529,183; to the other West Indies and Bermuda, 491,290; to the Central American states and British Honduras, 115,770; to South America, 191,220, and to other countries, 20,623, a total of 72,274,125 bushels, valued at \$39,811,921; in comparison with 13,029,939 bushels to the United Kingdom 3,236,972 to Germany, 5,187,282 to other countries in Europe, 4,401,061 to Canada, 610,285 to Mexico, 361,244 to Cuba, 565,798 to the other West Indies and Bermuda, 133,833 to the Central American states and British Honduras, 206,181 to South America, and 36,226 to other countries, a total of 27,768,921 bushels of corn valued at \$15,645,835, exported in the corresponding period of 1890-91.

Red Fife wheat grown by the Manitoba Government received the gold medal offered by the International Millers' Exhibition at Gloucester, Eng., for the best wheat.



## WEIGHING GRAIN AT KANSAS CITY.

At last the question of grain weights in Kansas City, which has for years been the source of much complaint and unpleasant comment, seems likely to be settled to the satisfaction of all parties. The committee appointed by the Commercial Exchange has held a conference with the chairman of the Western Weighing Association, and a plan was formulated whereby that association will have full charge of all the weighing of grain coming into or going out of Kansas City. The railroad companies will accept these weights, and being made by a disinterested party, they will be just, alike to the country shipper, to the Kansas City buyer and to the man at the other end, to whom the grain finally goes.

The plan has not yet come before the directors for adoption, but it will doubtless be accepted by them and be put in operation as soon as practicable. The Western Weighing Association will have a man at each elevator and at the important track scales of the city. With the weighing of grain thus taken out of the hands of interested parties, there will no longer be any chance for either buyers or sellers to complain of Kansas City weights. More than that, it will be possible then to lay at the door of the railroad companies, where it rightly belongs, the blame of short weights which has caused so much trouble in the past. Dishonest or careless elevator men there may have been in times past. But the shortages which have occurred in weights have in nearly all cases been due to stealing while en route or in the yards here, rather than to the cupidity of men engaged in the grain business. With the Western Weighing Association in charge, the railroads will have to bear the responsibility of shortages, and they will then be under the necessity of guarding their freight yards for the protection of property in their possession.—*Grain Trade News*.

## OF INTEREST TO GRAIN SHIPPERS AND ELEVATOR COMPANIES.

A good deal has been said in the columns of this journal in reference to the double entry system for recording weights, but not too much. It is a radical departure from the old way and has therefore its opposers; but whoever stops to consider for a moment must agree that on the face of it and without any evidence pro or con, it seems reasonable to suppose that mistakes are often made by weighmen. But we are not asked to suppose. Mr. Demuth, the inventor, had two years' experience with this system in the terminal elevators of the L. S. & M. S. Railway at Toledo, O., before it was put upon the market. Its worth is attested by the officials of the Lake Shore, and by all of the grain merchants at Toledo. At first it seemed that the only way to make the system practicable was to have the scales contrived expressly for this purpose, and consequently a scale company began making and selling the check scale beam with its scales.

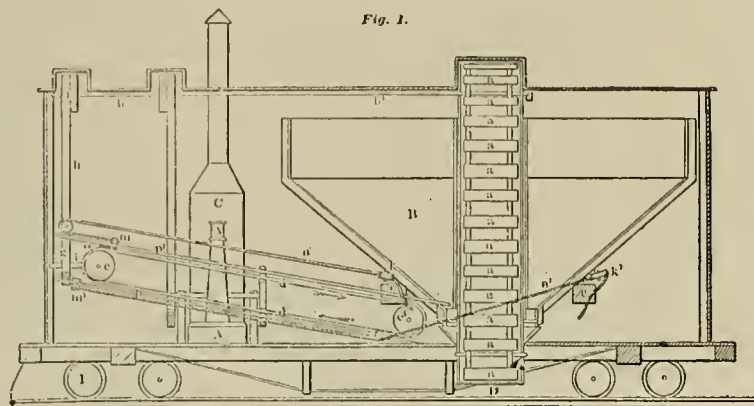
Within the past few months, however, Mr. Demuth has perfected an attachment which any grain shipper can apply to his scales. This is a matter which grain shippers should look into, as experience and developments prove that improved scale weights can not be relied upon. One thing is certain, that whatever Mr. Demuth says in regard to his experience with this system may be relied upon. Not only his system but he himself is endorsed by the grain merchants and bankers of Toledo, where he is well known.

Following are some of the prominent elevator companies, milling companies, grain shippers, etc., who are using Demuth's Double Entry System for recording weights: The Union Elevator Company, the Atlantic Elevator Company, Van Dusen & Co., Minneapolis; Canadian Pacific Railway Elevator Company, Richford, Vt.; Richmond Dock, Palmsville, O.; Martin Elevator Company, Minneapolis; Armour & Co., Elevators A and B, Elevator E, Minnesota Elevator; Chas. Counselman & Co., Sante Fe Elevator, Chicago; Illinois Steel Company, Joliet, South Chicago, North Chicago, Union Works, Bay View Works; New York Central & Hudson River R. R. Elevators; West Shore Elevators, Weehawken, N. J.; C. H. & D. Elevators, A & B, Toledo; L. S. & M. S. Ry. Elevators, A & B, Toledo, O., Bronson, Mich., Elkhart, Ind., Detroit, Mich.; Foster, Olmsted & Co., Fostoria, O.; Union Elevator Company and N. W. Elevator and Mill Company, Toledo, O.; Fairport Elevator Com-

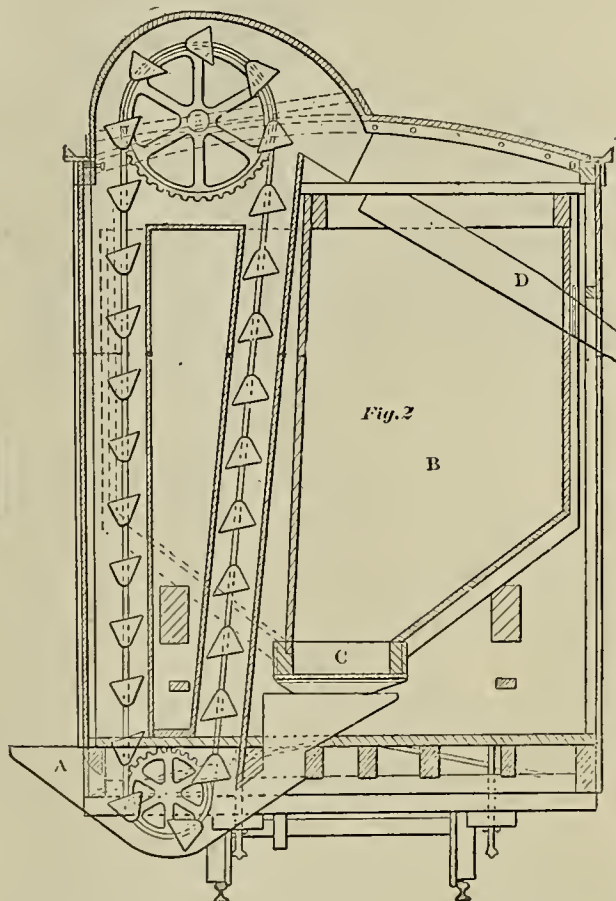
pany, Fairport, O.; A. & T. McMichael, McGregor, Ill.; Detroit Railroad Elevator Company, Detroit, Mich.; the Schumacher Milling Company, Akron, O.; the T., St. L. & K. C. Elevators, Toledo, O., and many others.

## THE JUMBO GRAIN TRANSFER CAR.

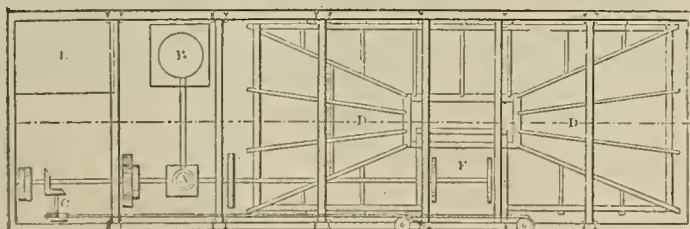
The grain transfer car, illustrated herewith, is the Jumbo referred to in our article on "Transferring Grain



at Chicago." At present seven of these cars are used in Chicago to transfer grain from cars of Western to cars of Eastern roads. The Chicago & Erie has two, the Ft. Wayne one, the Lake Shore two, and the Panhandle two. Although Jumbo Transfer Cars have been used



since 1883, there is still a chance for improvement. The object of the inventor was to lessen the cost and increase the facility of transferring grain from one car to another. At first correct weights and waste in transfer were not given the attention deserved, but the demands



of shippers have caused improvements to be made in both. Those of late construction have two trailing safety posts, not shown in cuts. They are placed on each side of the car about the middle of the hopper and hang from car so as to almost touch the rail. When the hopper is filled with grain the sagging of the car pushes the posts down upon the rails, and they in turn serve to support the car enough to enable the grain to be weighed. All of the cars, however, are not supplied with these

posts and it is claimed that cars without them sag so much as to make it impossible to secure anything near the approximate weight. Other objections raised are that the clearance between hopper and scale gear is not sufficient and that the scales are so cramped and confined that it is almost impossible to see when the scales are working correctly. Most of the cars now in use have two elevators instead of one, as shown in cut.

Of the illustrations, Fig. 1 shows a side elevation of the car; *a, a, a*, etc., are the elevator buckets, which are operated in the ordinary way by the main shaft *b, b*. *A* is the engine and *C* the boiler. *B* is the scale hopper, which rests, free from the elevator leg, on the scale timbers *c, c*; this hopper has a capacity of 80,000 pounds. The steam shovels are operated by the mechanism shown in front of the engine; *d, d* is an endless link belt which runs around the two sprocket wheels *e, e'*, in the directions shown by the arrows; movement to this belt is communicated from the main shaft of the elevator through the pulleys *f* and *g*, the belt *h*, and the shaft *i*, which is geared to the shaft of the sprocket wheel *e* by a spur wheel, not shown. On either side of the loop formed by the endless belt, and arranged parallel to its sides, are two iron rods or ways *p, p'*, along which travel freely the two followers *m, m'*, to each

of which respectively is attached one end of one of the two hauling ropes *n, n*. The free ends of these ropes, after being passed through the sheave pulleys *k* and *k'*, are attached to the shovels. As shown in the diagram, the lug *o* has just left the follower *m'*, and is in the act of engaging with the lug *m*, consequently the rope *n'* has hauled its load to the car door, and its shovel is ready to be taken to the end of the car by the handler, while the rope *n* is now beginning to haul its load to the door.

The movement of the endless belt with the lug *o* is so directed that by the time *m* shall have reached a point over the sprocket wheel *e'* where the lug shall disengage itself from the follower, the handler of the shovel attached to *n'* will have taken his shovel to the end of the car and, consequently, will have hauled the follower *m'* to a point near *e'* ready to engage with it on the return trip. By this it will be seen that the shovels work alternately, and thus keep a comparatively steady stream of grain pouring into the elevator boot at *D*.

The propelling mechanism of the car consists of a worm gear arranged upon a prolongation of the engine shaft *s s*, and which, by means of a suitable arrangement of an endless link-belt and sprocket wheels, communicates motion to the wheel *E* and its opposite. This prolongation of the engine shaft is fitted with a toggle joint so that the worm may be engaged or disengaged with its pinion at the will of the engineer. Fig. 2 shows an end elevation; *A* is the elevator boot on the side toward the car to be unloaded, into which the grain is shoveled by the steam shovels, as described in Fig. 1. From this boot it is elevated and dumped by the elevator *a, a, a*, etc., into the scale hopper *B*. When the car load is all transferred to the hopper it is weighed, and then a slide-gate *C* at the bottom of the hopper is opened and the grain again runs into the elevator boot, and this time discharges into the spout *D*, and thence into the car in readiness to receive it.

Fig. 3 shows the ground plan. *A* is the engine, *B* the boiler, *C* the shovel mechanism, *D* the scale hopper, *E* the elevator, *F* the water tank, which is fastened to the roof timbers and extends downward into the car just far enough to allow for free passage underneath.

The car is self-propelling, thus doing away with the cost of a switch engine and crew.

The steam shovels which form a part of this system are arranged upon a novel plan. The driving belt is run loose and is so adjusted that it will pull as large a load as can possibly be gathered by the shovel; but, should the shovel catch on a cleat or a broken board on the floor, there is no breakage of either shovel or hauling rope—the belt simply slips on the pulleys until the shovel-handler can clear the obstruction, and then completes the haul as if nothing had happened. The shovels work reciprocally; while one is hauling a load from one end of the car the other is going to the opposite end for a load.

Few of these cars can weigh a large ear of oats at one draft. Grain is sometimes damaged by rain while being transferred on a stormy day. A number of valid objections have been raised against them. The transfer house with scales on ground floor with rock foundation is so



much cheaper, so much more reliable, that it seems strange the Jumbo cars were not abandoned long ago. The transfer house transfers grain much quicker, without mixing or loss, and at less expense than any other transfer. We should have more of them.

### A PROTEST, A PETITION.

*To the Traffic Managers of Railroad Companies:*

We, the undersigned grain dealers, having been caused much trouble by unreasonable delay of grain in transit and also much loss by enforced idleness of capital invested and by depreciation in value of grain during delay, do hereby protest against such unreasonable delay and petition you to provide facilities sufficient to enable you to promptly transport grain at all times.

We also protest against the one-sided and therefore unfair charge for delay, and petition you to allow the delay of grain in transit to be governed by the same rules as govern the delay of cars on the line where the grain is delayed.

Name.....  
Address.....  
Name.....  
Address.....  
Name.....  
Address.....

As announced in our last issue we publish above a protest against the delay of grain in transit and the one-sided demurrage charge, and a petition for better service and a reciprocal demurrage charge. We request every grain shipper in the interest of his own business and the grain trade at large to cut out the above, sign it and send it to MITCHELL BROS. Co., 182-186 Dearborn street, Chicago, Ill. If there are other dealers at your station induce them to sign it. Next month we will publish a list of the signers and as soon as we have received a sufficient number of signatures a copy will be sent to the traffic manager of each grain carrying railroad company of this continent. Please do not delay, but sign and mail this protest and petition now.

### IMPORTANCE OF MARINE BILLS OF LADING.

Bills of lading are often looked upon as a mere matter of form, and being handled daily are often treated in a careless manner. The result of a little inattentance to this matter is most strikingly shown in the case of the S. S. "West Indian," at Acapulco on the Pacific coast. In commenting upon the case the *Pacific Coast Marine Record* says:

The loss of the steamer West Indian at Acapulco, and the anticipated refusal of the underwriters on the cargo to recognize any liability for its loss, prompts us to point out at this time to shippers and merchants the importance of seeing that their bills of lading are always properly made out, and that the voyage as described in their policies of insurance agrees with the bill of lading in every respect. We venture the assertion that few, if any, merchants have considered the fact when insuring, that if there is any deviation from the natural or customary course from the voyage the underwriters are at once relieved from all liability, even though the cause of loss should be entirely foreign and apart from the deviation. It is an implied warranty of every contract of voyage insurance that the vessel shall take the port or ports, if more than one, in the customary manner, or in the absence of custom in the most natural manner. In the case of the West Indian we understand that the captain called at Champerico and found that he would be unable to discharge his cargo for several days; he then decided to proceed down the coast, discharge the cargo destined for the lower ports and deliver the Champerico cargo on the way up. The vessel was lost before returning to Champerico. This is to our minds a clear and voluntary deviation on the part of the captain and absolutely frees the cargo underwriters from any loss.

From this it can be seen that too much care cannot be exercised by shippers in this matter, and the feeling of security so often expressed by the words, "That is none of my business, the insurance companies are bound to look after it," is based upon ignorance of the law, and frequently leads to litigation which might have been

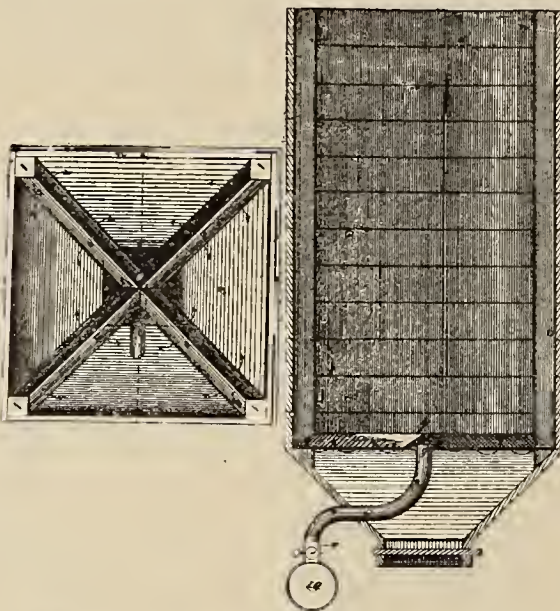
avoided had both parties to the contract fully understood their respective rights and duties.

If the voyage, as described in the policy of insurance, does not agree with that in the bill of lading, and the vessel should make a deviation permitted in the latter but not in the former, the loss falls entirely upon the cargo owners. If, on the other hand, the vessel used a port not named in the bill of lading, or there be any change in voyage in the nature of a deviation, the owner of the vessel is held under the law to be solely and entirely liable.

### VENTILATING APPARATUS FOR GRAIN BINS.

A ventilating apparatus for grain bins, illustrated herewith, has been invented by Frank Morton of St. Louis, Mo. The apparatus consists of a fan-blower, a pipe to conduct the air into the bottom of the bin and an inverted trough to distribute the air.

In the cut the figure to the right shows the fan with the bent pipe passing up and through the side of the hopper-bottom to the center of the bin where the air is received by the inverted troughs, shown in the figure at the left. These troughs cross each other at right angles, running diagonally to the four corners at the bottom of the bin. The lower edges of the troughs are placed on a level, or nearly so, to cause the air to pass out equally under their whole length. After leaving the troughs



VENTILATING APPARATUS FOR GRAIN BINS.

the air permeates the mass of the grain and passes off at the top.

By reason of its simplicity this apparatus can be placed in any bin now in use at small cost and without making any change other than cutting an opening in its bottom for the air pipe to enter.

### TRACK SCALES.

The recent report of the Railroad Commissioners of North Dakota contains much interesting reading, and among other things it contains letters of two railway managers, in which they denounce track scales as unreliable.

A. L. Mohler, General Manager of the Great Northern, says: "Track scales exposed to the weather cannot be relied upon for correct weight. After empty cars are weighed they must be taken to different points for loading and must be exposed to rain, snow and ice, and the weight of such cars is thereby liable to be increased to an indefinite amount, varying from 50 to 500 pounds per car." So much for the reliability of track scales and the "Weight of Car" marked on car by one competent to judge.

F. D. Underwood, General Manager of the Minn., St. P. & S. Ste. M. R. R., says that "weighing of cars of grain, except there be facilities for weighing empty cars on the same scales, is a comparatively useless proceeding. The tare weight expressed on cars is subject to so great variation, through thermal changes, repairs to cars, substitution of lighter or heavier wheels, that it has long ceased to have any value except where the coarser commodities are concerned, and then with only an approximate result."

Other railway managers are equally well posted regarding the unreliability of track scales, yet they continue to put them in and swear they weigh correct.

### FARMERS' ELEVATORS.

Last season there was quite a rage for building farmers elevators, and a number of these institutions were established in the province, in addition to some previously erected. The result, however, has been very disastrous to the farmers. These elevators are now full of wheat, nearly all of which would in all probability have been sold last fall and winter had it not been for the erection of these elevators. Once the elevator was built, it had to be filled with wheat, and the farmers who have taken stock in these elevators and have placed their wheat therein to hold for high prices have been sadly duped. The loss on wheat, if sold at present values, in comparison with prices last fall and winter, including storage and interest charges, shrinkage, etc., will amount to 25 to 30 cents per bushel. This 25 to 30 cents per bushel represents the loss to these farmers on the wheat crop of last season. Providing they make 5 to 10 cents per bushel each year, for the future, through their elevator enterprises, it will take them three to seven years to make up for their losses this year.

It would be interesting to know just how these different elevator schemes have been worked up. The *Commercial* of Winnipeg has been given particulars of one farmers' enterprise, which was carried through last summer.

The elevator in question was built nearly entirely on temporary credit. The farmers in the vicinity subscribed for the stock liberally, and on the strength of this subscribed stock the scheme was financed. The elevator was duly erected, and the farmers were to pay up their stock when they sold their wheat. They were innocently led to believe that the extra profit which they would make on the wheat through holding it in the elevator until toward spring would easily provide for the payment of the subscribed stock. But how different the result! The wheat is still unsold and instead of a profit over prices ruling last winter, sufficient to pay for the subscribed stock, the wheat is worth a great deal less now than it could have been sold for last fall. The date of payment for the elevator having arrived and the wheat unsold, the farmers were obliged to give their notes in payment of subscribed stock—notes bearing interest of course. Besides the loss through the decline in value of wheat, the unfortunate farmers are compelled to pay storage and interest charges, allow for shrinkage and run the risk of their grain heating or becoming worthless from damage in the elevator. Farmers' elevators can not be run without expense any more than other elevators, and in some cases the expense of running these elevators has exceeded the income derived from the regular storage charges upon the grain handled through them for patrons.

A large number of farmers' elevator enterprises have been worked up during the past winter, with a view to the erection of elevators this summer. It is likely however, that a number of these schemes will now fall through when the result of this season becomes generally known. In some years, no doubt, these elevators would prove profitable, but it will require a number of successful years to make up for the disasters of the present season.

The *Commercial* again has no hesitation in declaring that the farmers who leave matters of this kind alone and give their attention to the production of products of the best marketable qualities, best suited to the requirements of trade, and which can be produced to the best results, will come out ahead every time of those who try to attend to other lines of business as well as farming. Grain handling and shipping is no part of farming. It is a business by itself, and can be successfully handled only by those who thoroughly understand the business, and give their attention to the study of its requirements. The farmer who sells his wheat whenever it is ready for market and stops dreaming about becoming an exporter will show his wisdom.

Farmers are too easily gulled in matters of this kind. It is the easiest matter in the world to gull a farmer, if you start out by telling him that he is being cheated right and left by the unprincipled men of business. This false notion is at the bottom of many of the difficulties into which the farmers are led, and is accountable for the disaster brought upon many through these elevator enterprises. Politicians and others who wish to gain favor with the farmers, to serve their own selfish ends, work on these false notions and thereby tend to confirm the farmers in their error.



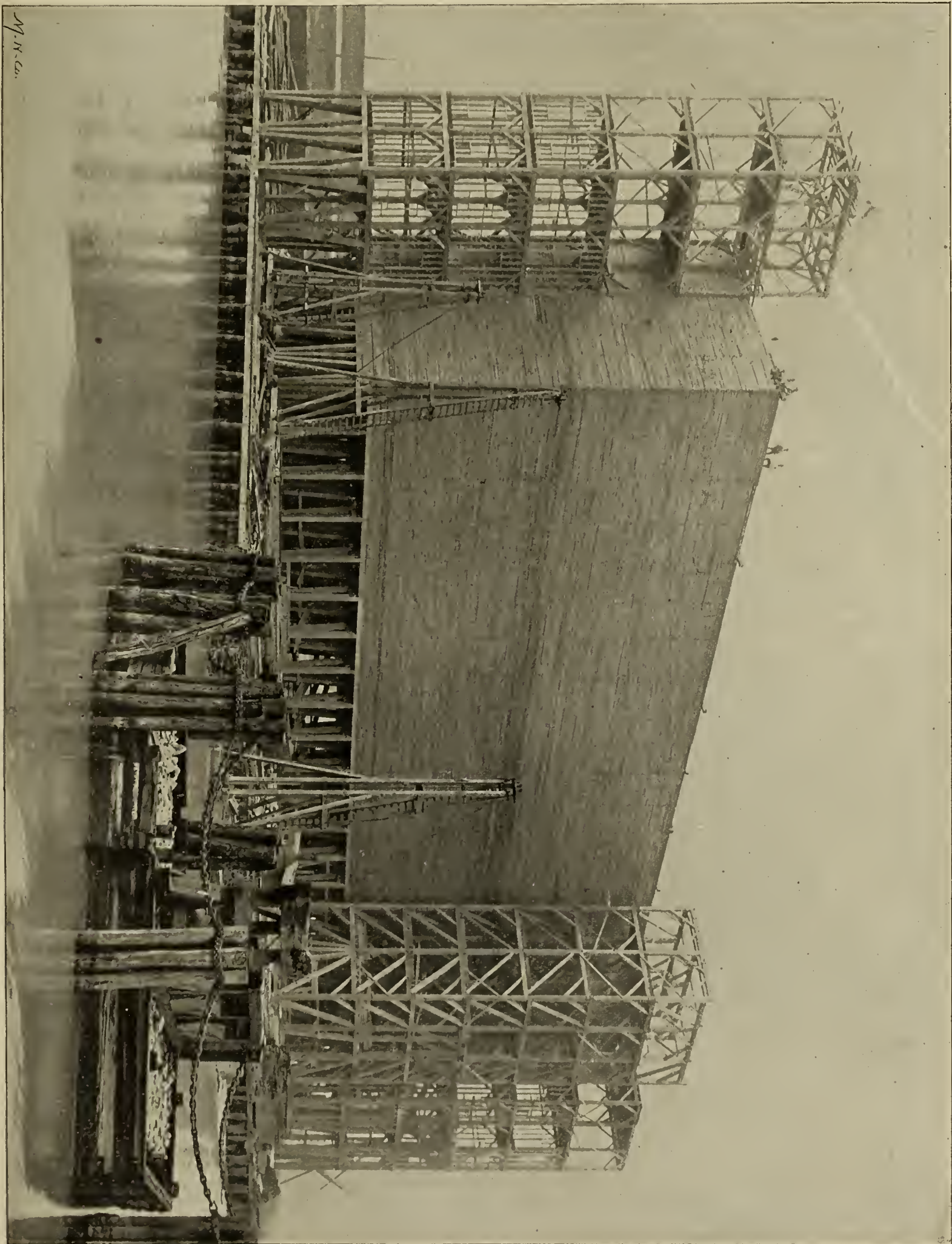
**NEW ELEVATOR AT BUFFALO.**

The illustration given herewith shows the new Spencer Kellogg Grain Elevator, now being built on Buffalo River by R. Dunbar & Son, the grain elevator architects, engineers and contractors. The cut, which first appeared

moored to dock can be unloaded in the shortest possible time and bringing her upon an even keel. The old Pratt & Wadham Slip is now being dredged out 30 feet more in width than at present and is 18 feet deep, making it a very desirable place to unload vessels. On the front of Buffalo River is the canal tower with two receivers and

**MILWAUKEE'S GRAIN TRADE.**

According to Secretary Langson, of the Chamber of Commerce, Milwaukee, which some years ago was known as the largest grain trade market in the United States, is regaining its lost grain trade. In his annual report,



NEW ELEVATOR AT BUFFALO.

n the Buffalo *Express*, represents the building in process of construction.

This elevator will have a stationary marine tower, also one of R. Dunbar's patent movable towers, so that two hatches of a vessel can be unloaded at once. The movable tower runs on a double track with 40 car wheels underneath, and can reach any hatch of a vessel within range of its 80-foot movement. A third movable tower is contemplated, so that the largest vessels afloat can be unloaded, using three legs at once, each leg having a capacity of 15,000 bushels per hour, so a vessel being

two loading spouts, so that a constant stream of grain can be given to canal boats. On the east side of the building is a large yard for car storage, having five railroad tracks; two car loading and trimming spouts are on this side of the house and the elevator is so arranged that it can unload from vessels, load cars and canal boats, all at the same time.

The storage capacity of the house is 600,000 bushels and it is under the management of Mr. Spencer Kellogg, after whom the elevator company is named.

Secretary Langson says: The grain trade in Milwaukee, which a few years ago was regarded by many to be hopelessly declining, has nearly regained the volume of its highest period of prosperity, and bids fair to far eclipse that in the near future. It is true that we have not recovered our lost ground as a shipping market for wheat, but we are now growing in that respect under more favorable influences than have prevailed for some years past, while the growth of our milling industries has largely increased the local demand for that commodity. In other kinds of grain the shipping trade has kept fully



up with the constantly enlarging wants of our local market. In barley Milwaukee has become the leading consumptive, shipping, and speculative market of the Northwest. The brewers consume 3,000,000 bushels and the commercial malting houses require about the same quantity for the manufacture of malt for shipment. The latter are constantly increasing their capacity, which at the present date is over 4,000,000, and before the end of the year will exceed 5,000,000 bushels annually. So that Milwaukee brewers and maltsters furnished a home market for 5,000,000 bushels of barley in 1891, and are likely to require not less than 7,000,000 bushels in 1892.

The fact also is not to be overlooked that the quality of grain marketed at Milwaukee, especially of oats, barley and rye, is superior to the average of these grains received at Chicago, which includes a larger proportion of products of a more southerly area than the receipts at Milwaukee. For this reason buyers for consumption give the preference to this market whenever the volume of receipts is sufficient to enable shippers to fill their orders with reasonable promptness.

### THE HATCH BILL UNCONSTITUTIONAL

An abstract of the argument of James C. Carter, Esq., of New York City, filed before the Senate Judiciary committee, on the question of the constitutionality of the Anti Option bill passed by the House and now pending before the Senate committee, is as follows:

Mr. Carter says the introduction and passage of the Hatch bill raises perhaps the most far-reaching and momentous question ever presented to Congress. It would be no exaggeration to say that if such legislation as that proposed in the bill should finally be declared to be within the constitutional power of Congress nearly every limitation of that power heretofore thought to have been imposed by the constitution will, for all practical purposes, be abrogated, and the internal policy and affairs of the several states, which have been supposed to be under the exclusive control of the states themselves, will be broadly subjected to the legislative authority of Congress.

There are many features of the proposed law which might be the subject to criticism, but it is my purpose to deal with one only—namely: that which imposes a tax upon all dealings in what are defined and described in the bill as "options" and "futures." The amount of the tax imposed upon the dealings described as "options" or "futures" is, besides the annual license fee exacted from the person engaged in such business, the sum of "five cents per pound for each and every pound of raw or unmanufactured cotton, hops, pork, lard, bacon, or other edible product of swine, and the sum of 20 cents per bushel for each and every bushel of any of the other articles mentioned in S. c. 3 of this act, the right or privilege of delivering which to another or others at a future time, or within a designated period, may be acquired by such dealer in his own behalf or in behalf of another or others under any 'options' contract or agreement, as defined by Sec. 1 of this act, or under any 'futures' contract or agreement, as defined in Sec. 2 of this act, or under any transfer or assignment of any such 'options' or 'futures' contract or agreement."

It is manifest, notorious, and indisputable that the imposition of this tax would be absolutely prohibitive of the business upon which it is imposed. No pretense is or could be made to the contrary. Consequently the law although upon its face purporting only to impose a tax for the apparent purpose of raising revenue, would not, in fact, produce a dollar of revenue, but would simply prohibit the business which it assumes only to tax. Inasmuch as every one must be presumed to intend the actual and necessary consequences of his voluntary acts, the purpose in view in passing such a bill must necessarily be taken to be to prohibit the business upon which the tax is imposed. Any denial of this intention would be wholly unavailing, but no denial is made. It is the avowed purpose of those who advocate this legislation to absolutely prohibit the business against which it is aimed.

Uninformed persons might inquire why, if the object be to prohibit a particular business, supposed for any reason to be injurious, a law prohibiting it in express terms is not framed and pressed upon the favor of Congress. The answer, of course, is plain. It has not as yet entered into the imaginations of men that Congress possesses any power to directly prohibit such dealings within the territories of the several states as are styled

"options" and "futures;" and if such a law were enacted, the belief that the courts of the land would declare it ineffectual and void would be so confident that no respect would be paid to it. But Congress has an undoubted power to raise revenue by taxation, and by taxation, should it deem it expedient, upon business of the character referred to. A law, therefore, which assumes only to impose a tax upon the business is, prima facie, at least a valid exercise of Congressional power.

The purpose, therefore—there can be no denial or question of this—of those who ask for the passage of such a measure is to bring about indirectly what cannot be accomplished directly—namely, the prohibition of the business referred to.

The real question, therefore, which arises upon this proposed legislation is whether Congress has the power, by a law which assumes the form only of imposing a tax, to prohibit the making of contracts which it has absolutely no power to prohibit in express terms. The plan adopted was, as all understand, designed to surrender only the common interests to a common control and to leave each individual state to shape and cultivate its own internal policy and work out its own destiny in its own way. To this end the constitution enumerated all the powers intended to be bestowed upon the new government. The first series of amendments adopted almost simultaneously with the original constitution, declared that "the powers not delegated to the United States by the constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people."

My main proposition is that every power conferred upon Congress was bestowed for certain limited purposes, and that it cannot be exercised except for the purposes for which it was given. If such powers may be exercised for any other purpose, they may be exercised for all other purposes, and consequently there is no limitation whatever upon their exercise. They would become simply arbitrary powers which might be exercised for any object which, whether directly or indirectly, might be accomplished through their instrumentality. This is the very essence of arbitrary power. To hold that the powers conferred upon Congress could be thus exercised would simply convert the Government of the United States into a tyranny.

Mr. Chief Justice Marshall lays it down as of the first importance that the end which Congress has in view in enacting any law must be one for which the power was bestowed. Says he: "Let the end be legitimate; let it be within the scope of the constitution, and all means which are appropriate, which are plainly adapted to that end, which are not prohibited, but consistent with the letter and spirit of the constitution, are constitutional."

Instances in which the constitutional validity of legislative acts has been challenged, on the ground that although they were apparently within the scope of a power possessed by the Legislature they were yet designed to accomplish an object not intrusted to it, and were, therefore, in reality perversions of the power, have more frequently arisen in reference to the legislation of the states. But the question is manifestly the same whether it arises in reference to the state or congressional legislation. It has always been so considered. The cases, therefore, which have arisen in regard to state legislation are entirely pertinent here.

The course of decisions in the Supreme Court in what are commonly called the passenger cases is illustrative of the foregoing doctrine. Nothing would seem clearer than the right of a state to prevent the introduction within its limits of persons likely to become a public charge, and laws requiring the masters of vessels to report to state officials the names, etc., of passengers whom they propose to land, and to give bonds to indemnify the state against the burden of supporting any of them, would seem very appropriate means of enforcing this right.

At the same time the exercise of such a power certainly approaches very nearly to a regulation of foreign commerce, a subject entirely within the federal jurisdiction.

Nothing can be plainer to any one who reads the history of the proceedings of the conventions which framed the constitution than that it was the intent of every one of the members to preserve to the states the general authority to regulate their internal concerns, which, of course, includes the authority to determine what occupations and pursuits shall be carried on and what contracts shall be permitted to be made therein. No authority over such concerns was intended to be bestowed upon the

general government, except such as was expressly conferred by the constitution, or was necessary in order to carry out some power thus expressly conferred.

If the power to tax can be employed by Congress for the purpose of prohibiting particular business transactions in the different states all the other great powers committed to Congress can be similarly employed. The power to regulate commerce, the power to establish tribunals inferior to the Supreme Court, to establish post-offices and post roads, the whole power of the Executive, all may be employed for the purpose of disfavoring and suppressing in the states modes of dealings which a majority in Congress may think prejudicial to the public good. Upon such a view of the powers of congress no state policy could stand against the hostile action of a congressional majority.

It may be said that should the proposed law be enacted, and the question of its validity be brought before the judicial tribunals, those tribunals would not inquire what the actual purpose of Congress in passing the law may have been, but assume that it was what it purports to be—namely: the imposition of a tax; and that inasmuch as this is confessedly within the power of Congress the law would still be declared as constitutional.

The first answer to this suggestion is that the present argument is not addressed to a judicial tribunal, but to the judgments and consciences of legislators. Whether there be any obstacle which would prevent courts from inquiring into and ascertaining the purposes of legislation, those purposes are certainly known to the legislators themselves. To them the constitution is, or should be, a rule in respect to the motives upon which they are permitted to act. They are not at liberty to use any power intrusted to them in order to accomplish an end over which the constitution gives them no control. But it is not true that, should the proposed legislation be enacted, the judicial tribunals would find any difficulty in determining that its real object was not to raise revenue, but to prohibit certain designated dealings. It is not, indeed, competent to courts to go outside of the language of a law and receive evidence tending to show what the object of legislators may have been in passing it. This is obviously an impossible inquiry; but this does not prevent a judicial tribunal from reaching a conclusion concerning the purpose for which any law was enacted. It will, of course, be assumed, in the first instance, that the object is that which it appears upon the face of the act to be; and consequently that the purpose of an act imposing a tax is to raise revenue. But courts are at the same time obliged to take judicial notice of notorious facts; and, therefore, if a law imposes a tax upon transactions plainly so great as to render it impossible that they should be carried on, a court is obliged to see, what every man of ordinary sense must see, that the object is not to raise revenue, but to prohibit the dealing against which the tax is leveled.

In the case of *Minnesota vs. Barber* the state of Minnesota had passed a law providing for the inspection of meats before the animals were slaughtered, and its validity was attacked on the ground that it tended, and was designed to impose a burden upon Interstate Commerce, which would be beyond the legislative power of the state. It has always been conceded that the passage of laws providing for the inspection of food, etc., was clearly within the scope of state legislation; and although there was nothing upon the face of this statute which, in terms, operated upon Interstate Commerce, the Supreme Court did not hesitate to say that it was designed to operate upon that commerce, and was consequently invalid. Mr. Justice Harlan, giving the opinion of the court, after referring to many cases, employed the following language: "Upon the authority of those cases and others that could be cited, it is our duty to inquire in respect to the statute before us not only whether there is a real and substantial relation between its avowed objects and the means devised for attaining those objects, but whether by its necessary or natural operation it impairs or destroys rights secured by the constitution of the United States."

Of course it would be likewise the duty of the Supreme Court, were the present act passed and its validity challenged, to inquire whether by its necessary or natural operation it impaired or destroyed rights secured to the people of the several states.

If you have the interest of your business at heart, you will sign "A Protest, A Petition," published elsewhere in this issue, and mail it to us.



## INSECTS INJURIOUS TO STORED GRAIN.

BY H. E. WEED, M. S., OF THE MISSISSIPPI EXPERIMENT STATION.

(Continued from page 399 of our June issue.)

The corn sap beetle, *Carpophilus pallipennis* Say, belongs to the family Nitidulidae the members of which, as a rule, feed upon flowers, fungi and dry decaying vegetable matter and are often found under the bark of trees. Some species, however, have been reported as feeding upon figs and raspberries. They receive the common name "Sap-beetles" owing to their entering fruit which has been previously injured by other insects or other causes.

This beetle, shown in Fig. 4, is about one-seventh of an inch long, of a brownish-black color, club shaped antennae, and light reddish-brown wing cases which do not fully cover the abdomen. The larva is shown at *a* in

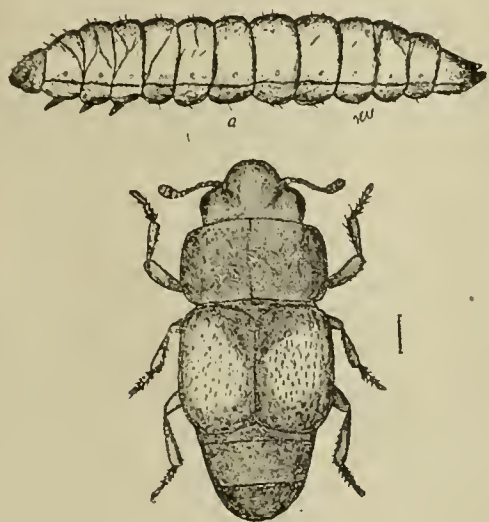


FIG. 4.

Fig. 4 and is about one seventh of an inch long. It has a brown head and a few sparsely placed hairs upon the body. It is readily distinguished from the larva of the red grain beetle by being slightly larger and more cylindrical.

This beetle is very common late in the summer and autumn. It is especially numerous where the ears have been injured by boll worms, and it is probable that they are attracted to the ears by the decay of the grain caused by the work of these insects. As a rule they feed only upon the dry decayed kernels at the upper extremity of the ears, but they will also feed upon sound corn, in which case the larvae are found within the seed as in the case of the other grain insects.

The corn sap-beetle is most common upon corn in the field, but it is also found in the corn throughout the winter when stored. This insect cannot be said to be very injurious, for, as already stated, it feeds mostly upon the dry decaying kernels at the upper portion of the ear.

Among the other insects injurious to stored grain may be mentioned the following: *Silvanus surinamensis*, Linn. is a small, flat, brown beetle very much resembling the red grain beetle, but readily distinguished from it by the saw-like edges of the thorax. This beetle is shown in Fig. 7 and, as seen from the illustration, the thorax has three very prominent longitudinal ridges, while the wing cases bear several less prominent ridges. It is often found along with the red grain beetle and in some localities causes considerable damage.

*Tribolium ferrugineum* Fab., is a small beetle which feeds upon dried animal and vegetable matter. It is quite common in museums and at the station is a troublesome pest in the insect collection. It is shown in Fig. 8, and as its name *ferrugineum* implies is of a light brown color. It is readily distinguished from the red grain beetle by being slightly larger and not as flat. In the granary it is sometimes quite common, especially in the spring.

*Culandra granaria*, Linn., the common grain weevil resembles very much the black weevil, but is slightly larger and lacks the red spots upon the elytra. Its habits and depredations are the same as those of the black weevil, and although sometimes found in the South, it is less common than in the Northern states.

The remedies for all the insects infesting stored grain are nearly similar. The Angoumois grain moth having been such a well known pest in Southern Europe,

insect mills, resembling a large coffee roaster, are constructed in which the grain is heated for a few hours, whereby the grain moth in its various stages is destroyed. Large machines are also built in which the grain is violently agitated by means of which the insects are destroyed.

Many claim that China berries (*Melia azedarach*) placed in corn cribs will tend to keep the weevils out and will drive away those already in the corn. To test this a quantity of China berries were placed in a quantity of husked corn infested with the black weevil. An examination of the corn several weeks afterward showed the weevils present fully as numerous as before. This being the case it is probable that the berries have but little effect either in driving the weevils away or in preventing their breeding.

Experiments with sulphur and salt proved both these substances effective in ridding the infested corn of the black weevils and the flat grain beetles. These substances were sprinkled upon husked corn quite freely and an examination a few days later showed none of the insects present in either crib. The same amount of these two substances placed upon corn in the husk in other cribs produced no effect upon the insects, as they were protected by the husk.

Many farmers throughout the South protect their corn by leaving an open place in the center of the roof of the corn cribs, so as to allow the rain to thoroughly wet the corn. It is claimed that this causes the corn to go through a process of heating during which the weevils are killed. If there is good drainage at the bottom of the crib the corn will not be spoiled by mould. This is said by those who practice it to be a thorough remedy, but opportunity for a trial on an extended scale has not presented itself at the station.

The best method of destroying grain insects, however, is by the use of bisulphide of carbon. Attention was first called to the use of this substance on a large scale by Dr. C. V. Riley in March, 1879, in an article upon the Rice Weevil. In this article Dr. Riley advocated putting the grain in a tight bin and treating each ton of grain with a quarter to half an ounce of the bisulphide by placing the bisulphide in an open dish on top of the grain and allowing it to evaporate.

Another method of applying the bisulphide is by means of a long tube or piece of pipe in which is a tight fitting rod. Push one end of the tube into the center of the grain, withdraw the rod, pour the bisulphide down the tube, after which the tube may be withdrawn. If a tight fitting rod cannot be obtained a plug can be put into the end of the tube, and after this end has been pushed into the grain the plug can be loosened with a rod or stick. The bisulphide is then poured in as before.



FIG. 7.

It will not be necessary that the bisulphide be put into the bottom of the bin as it is heavier than air. The object of putting it near the center of the grain is to secure as even a distribution as possible.

Recently Prof. A. P. Church has published in the *Kew Bulletin* another method of applying this substance. "A ball of tow is tied to a stick of such a length that it can just be plunged into the middle of the grain. The tow receives the charge of bisulphide like a sponge and is at once plunged into the sack or cylinder and left there, the mouth being tightly closed." Cotton is an excellent material to receive the charge of the bisulphide. A quantity of cotton should be securely tied to the end of a long stick and after the bisulphide is poured upon the cotton it should be pushed into the grain. The amount necessary will vary according to the tightness of the bin. If the bin is not tight or nearly so the bisulphide remedy will not be successful. In a tight bin, one ounce bisul-

phide to 100 pounds of grain, or one pound to the ton will suffice. If the grain is in a bin open at the top a thick blanket should be placed over it to confine the fumes of the bisulphide as much as possible. Should the first charge of the bisulphide fail to kill all the insects within the grain the ball of cotton can be withdrawn and the charge renewed.

In wheat, oats and shelled corn the last method of treatment is excellent, as the ball of cotton containing the charge of bisulphide can be very readily placed near the center of the grain. Corn not shelled, however, is best treated by putting the bisulphide in an open dish or sprinkling it over the top of the grain.

Care should be taken in using the bisulphide, as it is an explosive substance. Lamps, lighted cigars and the like, should not be brought near where it has been used, but if care is taken that no light is brought near until the odor of the bisulphide has passed away there is perfect safety in using this remedy.

Corn treated by means of the bisulphide of carbon should in all cases be husked, as the husk affords such

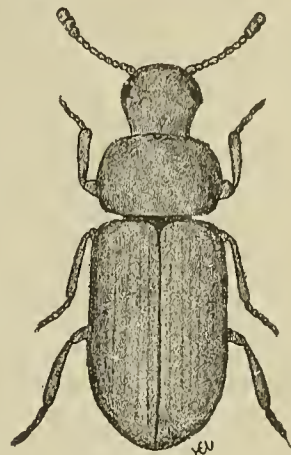


FIG. 8.

protection to the insects attacking the grain that a much larger amount is necessary in the treatment of corn in the husk than would otherwise be the case. If the corn is shelled the action of the bisulphide is still more effective.

If no tight bin suitable to treat the grain by means of the bisulphide of carbon is present a small 'quarantine' bin should be built for this purpose. The grain should be put into this bin, treated by means of the bisulphide, after which it can be placed in other bins or cribs. When treated the grain should be left in the bin a day or until the odor of the bisulphide has passed away.

Grain treated with the bisulphide of carbon is not injured in any way, as the germinating power of the seed remains intact, and odor from the bisulphide will pass away in a few days. The bisulphide of carbon is best obtained direct from the manufacturer, Edward R. Taylor, chemist, Cleveland, O., who sells it in fifty-pound cans at 10 cents per pound.

To destroy insects infesting mills quantities of the bisulphide should be placed in open dishes or plates in various elevated parts of the mill, and by means of a sprinkler, bisulphide should be applied to the waste, commencing the application in the basement and going upward. The mill should then be closed as tightly as possible and a watchman employed to see that no lights are brought near until the odor of the bisulphide has passed off. If a mill is thus treated on Saturday afternoon, work can be resumed as usual on Monday morning. The bisulphide should not be applied to an unpainted floor or wall as it will soak into the wood and it will take some time before the fumes will have passed away.

P. Morris & Son, millers of Lebanon, Ind., relate their experience in the use of bisulphide as follows: "We commenced in the attic and the fumes were so powerful that they drove us out before we succeeded in placing it where we desired to in the lower stories. So we would advise to begin in the basement and go up, then you will be working above the fumes all the time and will only have to pass through them in going out of the building. Whenever we could place it where we knew there were plenty of insects it killed them all. We think to saturate waste is an excellent way to apply it—is easily placed wherever you want it and evaporates readily."

Judging from the appellations of their buildings the elevator men of Kansas City dabble in astrology. They now have a "Sun Elevator," a "Star Elevator," a "Crescent Elevator," and one is now being built in the shape of a half moon.



## SHORTAGES IN SHIPMENTS TO SOUTHERN PORTS.

As was stated in our last issue the shortages in grain shipments to New Orleans had become so large and occurred so frequently as to cause considerable ill feeling. Finally the Commercial Exchange of Kansas City appointed a committee to visit New Orleans and Memphis and investigate the methods of and facilities for handling grain. Following is the committee's report:

"At Memphis we found that about two-thirds of the transferring was done in the yards of the K. C., F. S. & M. R. R. by running ten loaded cars on an elevated track about five feet above the normal level, and shoveling the grain directly into ten empties on the lower level.

"A small percentage of the transfer work has been done through the West Memphis Elevator, a house belonging to the K. C., F. S. & M. R. R. A still smaller amount has been done through Memphis Elevator in the city proper.

"Commenting on our Memphis investigation, we have to say we do not believe any railroad company should, under any circumstances, transfer grain through an elevator unless they have positive assurance that there is no grain in that elevator belonging to private individuals or firms, and that no grain company has any interest in the house or the grain therein. Possibly no mistakes will be made, but to be perfectly safe it is best to put away all chances of evil.

"The shovel transfer, as done at Memphis, is, in fact, the only correct mode of transferring. But it is very apparent to us that the railroad authorities have not hedged around this very important work, the safeguards that our very valuable commodity demands.

"The road pays the transfer gang \$1.25 per car on each car transferred. The cooperage of cars is left to these men. You can readily see that this all important work is not and cannot be done properly. The roads do not even furnish the lumber to make new doors when necessary or to piece out old ones when the cars are heavily loaded.

"We believe it is our duty to put this neglect before the managers of every transfer point toward the east and south of us. In fact, we think railroad superintendents should lay down ironclad rules to govern these transfer stations. The car inspectors should be compelled to give certificates that an empty is safe and in thorough condition to carry 10 per cent. more than its marked capacity before it is set out to a transfer station.

"Clean cars, well coopered in all weak points with heavy grain doors, is what we should ask for and get. Common  $\frac{3}{4}$ -inch lumber for grain doors will not stand the strain of our heavily loaded cars. A full inch hard lumber should be furnished at every transfer station.

"We believe that careless coopering will account for much of our shrinkage between Kansas City and New Orleans. The neglect around these points seems to have grown from an indifference to the true value of grain, and the reckless waste that seems so common throughout this great grain country. It can and will be easily corrected by steady and harmonious effort.

"For 50 miles north of New Orleans the L., N. O. & T. R. R. runs through large sugar and rice plantations, into each of which there are side tracks from 500 feet to a mile in length. On both sides of these switches the negro houses of the plantation are to be seen. We were told that during the busy export season the L., N. O. & T. R. R. Co. sidetracked from 500 to 1,000 cars loaded with grain on these plantation switches, some cars standing in one spot from 30 to 90 days. Whether the colored citizen helped himself or not, we are unable to say. But it is certainly safe to say that no railroad company should expose valuable property in this way without being willing to make all losses good.

"We also learned that very reckless switching was the cause of many leaking cars in both the L., N. O. & T. and the I. C. yards in New Orleans proper; also that efficient watchmen were not to be found in either yard.

At the Southport Elevator the scales were old fashioned and very many mistakes are likely to be made. In fact, it would be hard to avoid making them with the very best weighmasters they can get. Those scales should be abandoned, and the largest and best should be substituted. The superintendent of the road assured us that this should be done if we could prove that it was necessary. One chance for a weighmaster to make a mistake on a car is enough. But at the Southport there are sev-

eral chances to each car, and only great care and watchfulness can keep him from it.

"The New Orleans Elevator (Elevator A) is practically out of the race, having only one leg for unloading and a 100-bushel scale. If business is wanted there big improvements must be made.

"We are convinced that if we were well protected by all the railroads, and if the weighing done at destinations were on the latest improved scales, our shrinkage could be very safely confined within the limit of  $\frac{1}{2}$  to 1 per cent. loss.

"In conclusion, we will say that the railroad officials, elevator managers and the grain committee at New Orleans treated us very courteously and gave us every chance to post ourselves. They asked for copies of our report."

## NEW JAPANESE BUCKWHEAT.

Many of our country grain dealers are backward about introducing new varieties of grain, and some of them will not handle a new seed grain until it has been tried in that district. In view of the fact that farmers have purchased much seed grain from traveling peddlers at fancy prices that proved to be of inferior quality and some of it mere trash, it is not surprising that established grain dealers, who have a business at stake, are very careful in selecting seed grain.

The Japanese buckwheat, illustrated herewith, is now being largely cultivated and the old, native sort is giving way to it to such an extent that it is discarded in many com-



munities where the Japanese variety has been introduced. It is claimed that the yield of the new variety is largely in excess of the old one. The straw is heavier, and more branching, and the kernels twice the size of the old kind. It ripens a week earlier than the Silver Hull variety and yields two or three times as much. Those who have tried the Japanese buckwheat will have no other. The flour made from it is fully equal to that of any other variety, and millers speak well of it. We are indebted for the above cut to James Vick's Sons, Rochester, N. Y.

## OLD CORN IN KANSAS.

How much corn of the crop of 1891 remains in Kansas is a question upon which it is difficult to find two opinions alike. The biggest shipper in the state is utterly at sea on the question. He was of the opinion that the crop was overestimated, but is greatly surprised at the amount of corn marketed in the past month. One of the largest commission men here, says the *Grain Trade News* of Kansas City, thinks the state never had so much corn at this season as remains in farmers' hands now. Certainly a great deal remains in farmers' hands if the 141,800,000 bushels reputed to have been raised were actually harvested. The crop of 1891 was three times that of 1890, according to government figures, yet up to date there has not been so much corn received here this year as was received in the corresponding time of the year preceding. That ought to be indisputable evidence that a great deal of corn remains to be marketed. The farmers of Kansas learned a valuable lesson on the conservation of resources when they sold the big crop of 1891 at ruinously low prices, and were compelled to pay extravagantly high prices the very next year for corn to feed their stock. It is certainly very good business judgment on the part of the farmer to carry a large reserve of corn throughout the year and from season to season in anticipation of crop failures and high prices.

## THE SLICK GRANGER.

"The ways," saith the experienced grain dealer, "of the slick granger are numerous, varied and oftentimes past finding out, and at all times taketh the cake. When he selleth a crop he cometh to sell by the very best sample, at the same time he assureth the grain buyer 'that it is a leetle below the general run.' He exciteth competition on his own crop by claiming that where and when he selleth his entire neighborhood disposeth. And as he goeth from place to place he giveth away private bids made in as good faith as if sealed and sworn to, always saying that the last bidder winketh at him, indicating thereby that he was not through, and if any man offereth more, return again and I will go him a few cents better. And finally when he selleth, with the understanding that his wheat is to receive another fanning, he goeth straightway home, praiseth God that he is an average specimen of his noble work, then he mixeth, judiciously, all the tailings, separated by the thresher at harvest time, with it. And then he groweth wroth, when he taketh it to the mill, if the grain receiver hinteth that it is not up to some or not cleaned according to promise.

"He agreeth to deliver 600 or 1,000 bushels at a certain price and by a given time, and then if the price advanceth he will suddenly find that he has overestimated his crop, and, after receiving enough for seed and paying a neighbor for a hundred bushels, borrowed the previous year, he can only spare 300 bushels.

"But if the price declineth he stateth that his crop has turned out fully, and he hauleth in 1,400 bushels, partially made up of a neighbor's crop who has sold too low; forcing the extra amount on the buyer by the old dodge—'you bought my whole crop you know.'

"He, while delivering watcheth the buyer's scales as if dealing with a thief; and if the buyer insists on seeing the contents of every sack as it is emptied into the track box, ye granger taketh umbrage. He selleth a load of wheat; and if the loading be not closely watched by ye grain receiver, it proveth all grain alike. But if watched closely there remaineth a sack or two of screenings in the wagon, which he fetched along to sell for just what it is worth."—Selah.

## LOST BY HOLDING WHEAT.

Under the heading "Hard Luck," the London *Mark Lane Express* confirms what has been reiterated regarding the severity of the losses that have fallen upon English importers of grain. Our contemporary also discusses the hard luck that has likewise overtaken the farmers through holding their wheat in the following:

The fall in the price of wheat has proved a great disappointment to farmers, and the direct loss to the farming community is a heavy one. It is many years since there were so many wheat stacks unthreshed at this season as may be found now, and the indirect loss through capital locked up in wheat stacks must be very great. In the autumn the majority of those in any way connected with wheat fully anticipated higher prices.

Agriculturally speaking, there was nothing that looked safer as an investment than holding wheat, and a special effort was made to hold it. We know of almost innumerable instances where farmers did not buy in their usual quantity of animals because it looked as though the profit arising from cattle would not be equal to that which would be obtained by holding wheat. The hay and straw saved by those who had nothing to feed them, realize very little, straw not bringing home £1 per load, and hay being such a glut in the London market that only a limited quantity, and that of the choicest quality, can be sold profitably.

Grain merchants have been crippled and their faith in the future of the trade will be such as to render them slow speculators, and markets will remain heavy. The country will suffer because those with money in the land will be afraid to expend as much as they would like to; and many will have lost so much that they cannot, consequently the land will not produce as much as it might, and that loss will be nation's loss.

Doubtless it would prove costly to ascertain the world's acreage under cropping (we cannot believe that the present figures are correct), and it would be still more difficult to arrive at the actual yield, but surely some method might be adopted which would protect us from making such gross miscalculations.

"Old Hutch," the erstwhile Chicago grain speculator, has given up his public lunch room in New York City.



## COMMUNICATED

[We invite correspondence from every one in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

### FROM OREGON.

*Editor American Elevator and Grain Trade:*—Our best wheat land here is selling at \$50 to \$75 per acre, owing to improvements; while partially improved farms in the foot hills of the Blue Mountains can be bought for \$15 to \$25 per acre. These are the finest fruit and grain lands in the world when level enough for cultivation; while the climate is all that could be desired. No cyclones, no thunder or lightning, and but few cloudy days visit us in summer. Inclosed please find \$1 for which send me the AMERICAN ELEVATOR AND GRAIN TRADE for one year. I am the agent at this place for Hamilton & Rourke, grain dealers of Pendleton, Ore.

Very truly yours,  
J. D. ISRAEL.  
Weston, Ore.

### MADE EXTENSIVE REPAIRS.

*Editor American Elevator and Grain Trade:*—We have been making some extensive repairs in our elevators and consider that our establishments are now as well equipped for properly handling grain as any elevators of the same size in the country. One of the best track scales, thirty-seven feet long and of sixty tons' capacity, with Demuth's Double Entry System attached to the beam, has been placed in Elevator "A." We have also placed his "Check Scale Beam" on the ten hopper scales in Elevator "B."

We have taken your valuable journal, the AMERICAN ELEVATOR AND GRAIN TRADE, for some time and consider ourselves well repaid for the investment with the receipt of each number.

Yours truly,  
CINCINNATI, HAMILTON & DAYTON RAILROAD ELEVATOR COMPANY.  
Toledo, O.

### FREE STORAGE OF FARMERS' GRAIN.

*Editor American Elevator and Grain Trade:*—My business formerly paid expenses and left a fair margin of profit, but others have started in to buy, store and sell grain, and in their anxiety to get business they have adopted methods that destroy the profit. Their competition I do not fear.

One of the unbusinesslike ideas that my competitors have is that it pays to store the farmers' grain free of charge just for the sake of buying his wheat when he wants to sell, which is usually when markets have gone up. So firm are they in their conviction that this kind of business is profitable that I have been unable to convince them to the contrary. They will keep on until their affairs are wound up by a receiver, as was the case with a firm doing that kind of business at Wapakoneta, this state. This firm received grain from farmers ostensibly for storage and subsequent sale, but the grain was actually shipped out and sold.

The free storage and purchase of grain by elevator men is extremely demoralizing. The farmer becomes a speculator at the dealer's expense, and the dealer becomes a gambler at his own expense, for the dealer is virtually giving "puts," such as are dealt in by the "curbstone" brokers at Chicago, being strictly prohibited on the Board of Trade and by the laws of the land.

Some ask what difference does it make to the grain dealer whether he stores the farmer's grain before buying or after buying, and contend that much less capital is required to do the free storage business than to buy the grain and then store it. This specious argument seems to afford them great satisfaction. But the variation in prices must be taken into consideration in connection with the privilege the farmer has of selling when the price is highest.

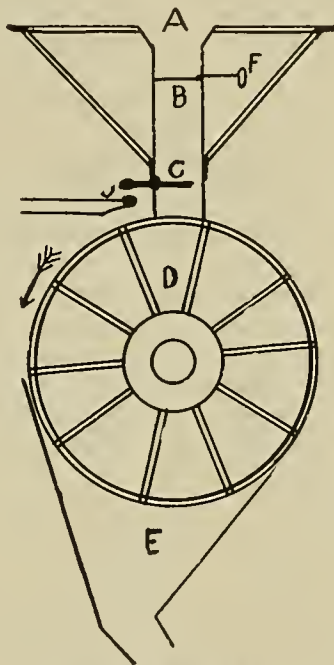
If the dealer does a legitimate business he gets the profit for handling and shipping, and the income from storage charges on grain, and also the benefit of high prices, but when he does a free-storage business his profit

is only in handling and shipping, which I claim is not enough to make good the cost of giving free storage and the loss from buying only when prices are highest. Hoping to hear from others on this important subject, I am

Yours truly, OHIO DEALER.

### GRAIN MEASURER.

*Editor American Elevator and Grain Trade:*—I inclose herewith a drawing of a grain measure which I think "A. M. P." and other elevator men will find as an effective check upon their weighman as any automatic scale and at the same time it is much cheaper. Any carpenter can make one, and if well made it never gets out of order or makes a mistake. In this device the grain passes from a hopper A and down a spout to the rotary drum D, divided into ten compartments, and thence to the chute E. A slide B,



GRAIN MEASURER.

operated by the handle F, cuts off the supply when desired; and the plate C in the spout gives notice when the supply has ceased, by overbalancing, establishing electric contact at O and ringing a bell, which may be placed at any convenient point. The number of rotations of the drum is recorded by suitable mechanism not shown in the cut.

This device is simple in construction and easy of operation, and requires little skill to erect and little power to drive it. A large quantity of grain can be measured in a short time, as the machine operates continuously and the material goes through in a constant stream.

Very truly, PRACTICAL.

### GRAIN TRADE OF RICHMOND, VA

The annual meeting of the Board of Directors of the Richmond Grain and Cotton Exchange was held July 6 in the rooms of the Exchange. Mr. N. R. Savage was in the chair and Captain B. A. Jacob, the secretary, was at his post.

The reports submitted by the various officers showed the Exchange to be in a good condition. The secretary reported one death and seven withdrawals during the year, and two new members elected—present membership, 82. The following tells the amount of business transacted on 'Change: Wheat, 439,396 bushels; corn, 411,096 bushels; oats, 294,416 bushels; rye, 6,196 bushels; barley, 2,400 bushels; meal, 19,032 bushels; pease, 704 bushels; grass-seed, 302 bushels. Total, 1,173,542 bushels—an increase of 84,716 bushels over last year's work. Also, 1,099 tons of mill-offal.

The following are the receipts reported by railroad companies: Wheat, 1,068,942 bushels; corn, 1,167,770 bushels; oats, 794,284 bushels; rye, 9,942 bushels; barley, 3,200 bushels. Total, 3,044,138 bushels—an increase of 102,884 bushels over last year's receipts; flour, 324,905 barrels—a decrease of 44,810 barrels; cotton, 2,122 bales.

The grain inspector reported 767 cars and three vessels of grain inspected during the year.

Take at least one step against the unreasonable delay of grain in transit and the one-sided demurrage charge by signing "A Protest, A Petition," published in this issue.

## Trade Notes.

There is a land of bitter tears and wailing—  
A land most like that drear one Dante knew.  
Where wan face Niohe, with dark robes trailing,  
In sad procession moves, brows crowned with rue.  
It is a land peopled with witless mortals—  
Compared with them the Virgins five were wise,  
And it is writ above its gloomy portals:  
"We did not think it paid to advertise."

Successful advertisers are those who use judgment in placing their advertisements, as well as brains in constructing them.

There is one thing in particular that the advertiser is too apt to overlook or to slight; that is the fact that advertising is by no means to be limited to the larger objects, to the neglect of the smaller and even the insignificant ones.

Frank Schell of Oskaloosa, Kan., has applied for a patent on a grain purifier. The machine runs on an upright shaft and is said to be the only device that will remove rotten grain, smut, etc., and purify with only one handling.

"Not only how much, but where?" is the question advertisers should consider with reference to a paper's circulation. Quality is good and quantity is good. In reaching investors and purchasers of high-class goods quality is imperative.

The incorporators of the Fidelity Anti-Choke & Elevator Alarm Manufacturing Company at Duluth, Minn., are Herbert E. Long and W. G. Cogswell of Duluth, James B. Soule of Minneapolis and Charles E. Soule and Linnie S. Soule of Grand Rapids, Mich.

Some men try advertising as they take an emetic. It's a dose for them; they only want it at long intervals and they wish to see quick results. They see the results and feel mean. Other men use advertising like a tonic; they try it every day. The result is they are braced, in the one case physically, the other financially. They see results too.

The more advertising you do, the more power what you have done has. The first insertion of an advertisement in a medium makes but little impression. The second insertion makes a deeper impression than the first, and also helps to deepen the impression of the first. The third insertion goes still deeper, and also helps the two before it. And so on, *ad infinitum*.

"Spare the advertisement and spoil the business." This is the course adopted during warm weather by thousands of men who would not enjoy being informed that they were anything but clear-headed managers. It is, however, a fact that those nervy men who use advertising space in abundance during the summer months secure business which would not otherwise be theirs.

The Neracher-Hill Sprinkler Company, having factories at Warren, O., and Columbus, Ga., has been awarded the contract for equipping nine of the American Biscuit Company's factories situated at Omaha, St. Joseph, Memphis, New Orleans, Chicago, Milwaukee, Denver and elsewhere, with sprinklers, of which 8,000 to 9,000 will be required. Their contract for the refineries of the sugar trust at various points in the country has nearly been finished.

Merchant & Co. of Philadelphia, with branches at New York, Chicago and London, announce that in the future they will manufacture their well-known brands of roofing tin, "Merchant" and "Alaska," in Philadelphia and no longer import them from abroad. Their unqualified success with American tin, and the production of plates equal to the very best foreign article they ever dealt in has led them to take this step. No "wasters" of these brands will be put on the market. The firm has sent out a unique photogravure print of the tower on the Masonic Temple at Mount Holly, which is covered by their Spanish tile.

Our hushel measure had its origin in England at the time of the Roman occupation before the Christian era. The chief standard of measure was the "Sextar," or pint, a vessel holding  $1\frac{1}{4}$  pounds of water; 64 of these measures constituted a bushel, and 32 bushels made a "Celdra," "Chalder" or "Chaldron," so that 8 hushels equaled a quarter of a "Chaldron" and were consequently called a "quarter," the present English measure.



## Queries and Replies.

Questions and answers are inserted under this head free of charge and all are invited to avail themselves of this column.

**No. 1. Apparatus for Drying Grain.**—In the May number of the AMERICAN ELEVATOR AND GRAIN TRADE was published a short account under the head of "Drying Corn for the Contract Grade," in which is mentioned the adoption and successful operation of a grain dryer now in use by one or two Chicago firms. Can some reader give me any further particulars as to the kind of dryer and the process used by these parties, or the name and address of the manufacturer of the machine in question or any other machine used for this purpose. Any information in regard to the above will be gratefully received by A SUBSCRIBER.

### THE EVILS OF ADVERTISING.

BY OBSERVER.

Perhaps no good thing is entirely unmixed with evil. Almost every use has its abuse. The telephone, the telegraph, the elevator system, all have their uses, which, of course, greatly overbalance their abuses; nevertheless their abuses are often so baneful and potent as to neutralize in no small measure the unmixed good which they otherwise would serve us. The often unimportant and trivial character of telephonic communications results in slow service and tardy connections. It thus happens that when your house is on fire or a doctor is wanted in great haste your excited Hello! receives no more prompt attention than the young woman's languid "Hello!" when she only wants to talk with her friend about "last night." So too, the apparently easy accessibility of the telegraph for wholly unfounded reports of disaster to crops here and there, the false statements in reference to Mr. Blaine's health, and in short the perfect facilities it affords for spreading packs of lies about anything and anybody broadcast throughout the land, tend, certainly, to diminish its trustworthiness. And so too, the elevator. If it and all other great improvements could be relied upon to serve only ideal purposes, what boons they would prove to well meaning people.

But of all the fields for imposition, misrepresentation, and downright rascality the advertising field is the biggest. The biggest, because everything is advertised that everybody wants, and a great many things that nobody wants or should have. Of course the big dailies do the most harm because their columns are open to everything and everybody. For this very reason they probably do the least good as advertising mediums. They exclude nothing which pays, so that their columns are a heterogeneous conglomeration of good, bad and indifferent, and as they are thrust under our nose every morning, noon and night, no one thinks of looking them over except the class of people who are interested only in the worst class of advertisements.

We are sometimes inclined to grumble at the nearly equal division of leaves in our monthly periodicals between "reading matter" and advertisements; but the responsible air and tone of the advertisements make amends; and after remarking about "those advertisements being about half the book," we proceed to look them through, page after page. And they are interesting. What makes them interesting? Their apparent trustworthiness. What makes them appear trustworthy? Their manifest exclusiveness. The monthlies have taken their cue from the trade periodicals. The presence of an advertisement in their columns seems to bear a sort of editorial indorsement, not directly of course, but by the company it keeps. A trustworthy advertisement like a virtuous person, should keep good company. It is the editor's office and interest to establish good society for honest and well meaning advertisements. While he cannot give his personal indorsement to every advertisement in his columns he can, by studiously excluding whatever is extravagant in its pretensions, or whatever is not adapted to the wants of virtuous people, make his patrons assured of the character and responsibility of his advertisers. For this reason the proper field for the elevator architect, the elevator supply manufacturer, the engine maker, the scale maker, is the advertising columns of the journal whose

editor is in touch by reason of experience with elevator interests.

Every trade should have its organ, and every organ should be, so far as possible, an indorser of the commodities advertised in its columns. This, however, implies trustworthiness on the part of advertisers, and trustworthiness implies honesty in representation. One of the most glaring evils of advertising is misrepresentation. When a man writes an advertisement he should do it as if he were under oath. Let him stop to consider that his business integrity is at stake. If the editor who accepts his advertisement will make some effort to satisfy himself that the advertisement is a fair representation, then and not till then will a business man's advertisement have the weight that it should have. To prove that this is true, take a look at the other side of the matter. "Bankrupt Sale!" "One-third off!" "One half off!" and all such extravagant and unreasonable stuff. Who pays any attention to it? Somebody certainly, but nobody of business repute. The editor's aim should be to establish an exclusive advertising medium; the advertiser's aim should be to establish a reputation for fair representation. These are necessary stones in the foundation for a permanent business.

### "OLD HUTCH" A NIGHTHAWK.

A group of plungers on the Produce Exchange assembled in a corner of the immense trading room after the closing hour, says the New York *Advertiser*. It was made up of the more prominent members of the "Reminiscent Club"—a body whose sessions are regulated by the condition of the grain market.

The name of Benjamin Peters Hutchinson, familiarly known as "Old Hutch," finally came up, and the session adjourned before the details of the once great speculator's big operations had been thoroughly told. His big wheat deal of 1889 was the principal topic of discussion. All agreed that it was a wonderful piece of clever maneuvering and skillful manipulation, and a few regretted the old man's physical and financial downfall. The conversation suddenly turned from his past business life to his present hermit-like life in New York. "How does he live, and what does he do with himself?" asked an inquisitive member.

"I can't tell you when he eats or sleeps," replied another, "but I can honestly say that I never saw him more than two hundred yards away from the Produce Exchange, and if he is not on the street you can safely rely on the fact that he is either lounging in Anthony Brown's office on New street, or is paying a visit to a cafe in the neighborhood."

The brokers were right to a certain extent, but at the unearthly hours of the night "Old Hutch" can be more readily found on the streets surrounding the Produce Exchange than he can in his humble room in Brown's office. Insomnia or eccentricity has transformed the man whose simple habits were once proverbial into a night-hawk of the most pronounced stripe. His principal stamping ground is Whitehall street between Beaver and South Ferry. At almost any hour after 11 o'clock at night the tall, gaunt figure of "Old Hutch" may be seen on his lonely beat. The figure is inclosed in a long, threadbare broadcloth coat, and his head is covered by a broad-rimmed, soft felt hat. His eyes are always on the ground and his hands are carried behind his back. His gait is measured and slow. He seldom recognizes any one and never responds to the "Good evening" or "Good morning" of the night watchmen in the lower districts. His favorite walk is along the water. When near the Barge office he usually takes a seat on a bench and sits for hours looking out over the bay. At 10 o'clock every morning he is back in the street. No one seems to know whether he is operating or whether he has a dollar to his name.

The "Old Hutch" of to-day is a greater character than he ever was in his halcyon days in Chicago, when he held the wheat market in the palm of one hand and with the other pulled out over two million dollars from the "corner" he so ingeniously and successfully formed.

A protracted drouth afflicted Gage Co., Neb., in June, threatening the crops. So alarming was the prospect that the Beatrice Board of Trade held a meeting and decided to send two members to visit rainmaker Melbourne on the first train and implore his aid in their extremity. To the great surprise of all, while the committee of two was preparing to start, a copious shower fell upon the parched earth as if in answer to their earnest prayers.

## Points and Figures.

Broom corn valued at \$212,567 was exported in the eleven months ending with May, against \$159,269 worth in the corresponding period of 1890-91.

If the delay of grain in transit from one to four months and the one-sided demurrage charge pleases you, do not sign "A Protest, A Petition," published in this issue.

The heavy receipts at Chicago of low grade corn have so depressed the market that farmers in Iowa and Nebraska have been advised not to deliver until the grading improves.

If the Hatch bill should become a law the members of the Chicago Board of Trade will become farmers to escape the provisions of that most odious piece of class legislation.

Agents of the Michigan World's Fair Board are attending all county and other fairs in the state and selecting all that is best for exhibition at the coming World's Columbian Exposition at Chicago.

Merehandise valued at \$828,767,858 was imported in the twelve months ending with May, against \$846,888,913 worth and \$775,084,658 worth in the corresponding periods of 1890-91 and 1889-90 respectively.

Merchandise valued at \$1,022,961,528 was exported in the twelve months ending with May, against \$879,997,426 worth and \$852,984,905 worth in the corresponding periods of 1890-91 and 1889-90 respectively.

H. H. Hill, Dayton, Ind.: "Although I have gone out of the grain business I find it a pleasure to receive the AMERICAN ELEVATOR AND GRAIN TRADE, and at the expiration of my subscription shall subscribe for it again."

Each car belonging to a prominent railway company of the Northwest has in its interior a line called a load line for the several kinds of grain offered, showing what quantity of the different grains will fill the car to either of these lines.

Our exports of hay in May were 3,283 tons, against 1,922 tons in May, 1891, and during the eleven months ending with May we exported 32,493 tons, valued at \$538,766, against 26,052 tons, valued at \$434,934, during the corresponding period of 1890-91.

Our exports of hops in May were 16,128 pounds, against 144,488 pounds in May last year; and during the eleven months ending with May, 12,593,419 pounds, valued at \$2,417,982, against 8,634,052 pounds, valued at \$2,296,241, during the corresponding period of 1890-91.

Corn oil has been found by German manufacturers to be of great utility in the making of soft soaps and for other purposes, but importations from the United States were checked by the discovery that the duty was nine marks per 100 kilograms. Importers will endeavor to have the duty placed at four marks in the new tariff which is the tax on linseed oil which corn oil is to supplant.

A circular issued by a Baltimore house says in a roundabout way that New No. 2 Wheat at Chicago is not deliverable upon contracts, with the object, no doubt, of drawing trade to Baltimore where no such restriction exists. And even the Cincinnati *Price Current* has said, "short sellers should bear in mind that new wheat is not deliverable on Chicago contracts before November 1." As a matter of fact new wheat has for years been deliverable upon Chicago contracts. The object of the inspectors in grading it New No. 2 Wheat is simply to distinguish it from old wheat. New wheat is up to contract requirements in every particular.

## OUR CARD BASKET

We have received calls from the following gentlemen prominently connected with the grain and elevator interests, during the month:

B. F. Ryer of the Simpson-Robinson Company, Minneapolis, Minn.

H. C. Rau of the Prinz & Rau Manufacturing Company, Milwaukee, Wis.

F. E. Lehman, representing the J. B. Allfree Manufacturing Company, Indianapolis, Ind.

H. F. Kleibacker, representing the Morton Grain Ventilator, of St. Louis, Mo.



## INSPECTED RECEIPTS AT CHICAGO.

According to the report of Chief Grain Inspector P. Bird Price the grain received at Chicago during the month of June was graded as follows:

## WINTER WHEAT.

Railroad.	White.			Hard.			Red.				No Grade.
	2	3	4	2	3	4	2	3	4	5	
C. B. & Q.	4	1	1	35	36	11	34	13			
C. R. I. & P.	1	7	28	4	10	11	5				
C. & A.	1	1	15	4	14	8	7				
Illinois Central			9	2	11	8					
Galena Div. N. W.			1	6	14	2					
Wis. Div. N. W.	5	2		27	6	2					
W. St. L. & P.		1		1	8	15					
C. & E. I.				2	8	1					
C. M. & St. P.	3	2	2	32	24	4					
Wisconsin Central											
C. St. P. & K. C.			190		4	13	1				
A. T. & S. Fe.	2	3	822	8	132	336					
Through & Special	1		99	3	55	14	1				
Total each grade	12	7	3	133	119	309	460	29			
Total W. wheat								2,151			

## SPRING WHEAT.

Railroad.	2			3			4			No Grade.			White.		Mixed Wheat.	
	2	3	4	2	3	4	2	3	4	2	3	4	2	3	2	3
C. B. & Q.	8	125	46				4						84		1	
C. R. I. & P.	5	21	8				2						40			
C. & A.		4	1										3			
Illinois Central		5	1													
Galena Div. N. W.	7	99	31				3						2			
Wis. Div. N. W.	4	9	1												1	
W. St. L. & P.		1	1													
C. & E. I.																
C. M. & St. P.	25	35	11				2						5			
Wisconsin Central																
C. St. P. & K. C.		6	5				11						2			
A. T. & S. Fe.	2	3											2		2	
Through & Special	268	142	26				3						42			
Total each grade	319	450	131				25						180		4	
Total Spg. wheat															1,114	

## CORN.

Railroad.	Yellow.		White.		2		3		4		No Grade.
	2	3	2	3	2	3	2	3	2	3	
C. B. & Q.	186	861	16	65	346	1,965	857	486			
C. R. I. & P.	57	198	1	19	228	746	471	325			
C. & A.	29	138	1	42	14	57	69	28			
Illinois Cent.	98	498	27	106	24	160	522	182			
Gal. Div. N. W.	65	506	1	20	61	844	1,463	638			
Wis. Div. N. W.	1						2	5			
W. St. L. & P.	16	209	7	58	15	75	156	74			
C. & E. I.	3	42	1	3	3	35	23	7			
C. M. & St. P.	7	121		6	10	681	358	402			
Wis. Central											
C. St. P. & K. C.	4	58		1	21	292	340	238			
A. T. & S. Fe.	60	221	4	9	93	450	197	101			
Thrh'g & Spl	2	25	1	1	3	252	193	34			
Total each grd	528	2,877	59	330	818	5,559	4,651	2,517			
Total corn								17,340			

## OATS.

Railroad.	White.		2		3		White Clipped.		No Grade.
	2	3	2	3	2	3	1	2	
C. B. & Q.	386	519	80	157					10
C. R. I. & P.	17	822	25	265					8
C. & A.	88	130	25	28					1
Illinois Central	231	308	239	87					2
Galena Div. N. W.	133	798	71	233					17
Wis. Div. N. W.	57	201	13	26					3
W. St. L. & P.	55	53	78	15					2
C. & E. I.	23	14	33	4					
C. M. & St. P.	379	983	94	261					16
Wisconsin Central	1								1
C. St. P. & K. C.	22	165	57	43					
A. T. & S. Fe.	51	110	78	17					
Through & Special	89	216	44	63					2
Total each grade	1,532	4,319	888	1,199					61
Total oats									7,965

## RYE.

Railroad.	1		2		3		No Grade.
	1	2	1	2	1	2	
C. B. & Q.					17	17	1
C. R. I. & P.					13	6	
C. & A.							
Illinois Central					8	3	
Galena Div. N. W.					12	3	
Wisconsin Div. N. W.			5	3	3		
W. St. L. & P.					2		1
C. & E. I.					1		
C. M. & St. P.					22	2	
Wisconsin Central							1
C. St. P. & K. C.					5		
A. T. & S. Fe.					4	2	
Through & Special					16	7	1
Total each grade			5	103	43		4
Total rye							155

## BARLEY.

Railroad.	Bay Brewing.		3		4		5		No Grade.	Total No. Cars by Each Road.
	3	2	3	4	5	6	7	8		
C. B. & Q.			32	7	3					6,412
C. R. I. & P.			13	12	2				1	3,377
C. & A.										708
Illinois Central			3	20	1					2,555
Galena Div. N. W.			48	58	12				3	5,160
Wis. Div. N. W.			4	51	40				3	482
W. St. L. & P.					1					874
C. & E. I.										203
C. M. & St. P.			1	95	25				2	3,618
Wisconsin Central				1						5
C. St. P. & K. C.				9	17				2	1,506
A. T. & S. Fe.			2		1				1	1,713
Through & Special										1,623
Total each grade			7	252	181	33			9	29,209
Total barley									482	

## VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, July 9, 1892, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, bu.	Oats, bu.	Rye, bu.	Barley, bu.
Albany		12,000	17,000	3,000	
Baltimore	494,000	131,000	75,000	9,000	
Boston	133,000	58,000	24,000	1,000	14,000
Buffalo	5,000	363,000	270,000	9,000	69,000
do afloat	4,678,000	4,118,000	1,470,000	100,000	22,000
Chicago					
do afloat					
Cincinnati	6,000	1,000	4,000		20,000
Detroit	69,000	5,000	25,000		18,000
do afloat					
Duluth	3,541,000				
do afloat					
Indianapolis	18,000	11,000	17,000		
Kansas City	441,000	124,000	41,000	9,000	
Milwaukee	323,000	5,000	41,000	14,000	45,000
do afloat					
Minneapolis	7,195,000	3,000	3,000		
Montreal	580,000		838,000	8,000	117,000
New York	1,213,000	412,000	624,000	20,000	37,000
do afloat	32,000		57,000	6,000	80,000
Oswego	8,000				10,000
Peoria	23,000	137,000	135,000	10,000	
Philadelphia	291,000	205,000	207,000		
St. Louis	442,000	261,000	113,000	7,000	
do afloat	45,000				
Toledo	262,000	110,000	63,000	4,000	
Toronto	86,000		15,000		38,000
On Canals	728,000	42,000	448,000		20,000
On Lakes	1,976,000	1,073,000	952,000	38,000	
On Miss. River	46,000	11,000	22,000		
Grand total	23,130,000	7,082,000	5,454,000	238,000	485,000
Same date last year	11,805,219	3,964,773	2,797,755	214,409	81,949

## EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from Atlantic ports during the two weeks ending July 9, as compared with same weeks last year, have been as follows:

	For week ending July 9.		For week ending July 11.		For week ending July 2.		For week ending July 4.	
	1892.	1891.	1892.	1891.	1892.	1891.	1892.	1891.
Wheat, bu	1,579,500	1,425,400	2,014,800	1,21,800				
Corn	560,900	866,100	616,500	593,100				
Oats	560,900	5,500	242,000	1,000				
Rye	52,000		81,000					
Flour, bbls.	283,400	155,800	290,900	153,600				

## WHEAT RECEIPTS AT PRIMARY MARKETS.

The wheat receipts at primary markets during the fifty-two weeks ending June 25 for the last three years were as follows:

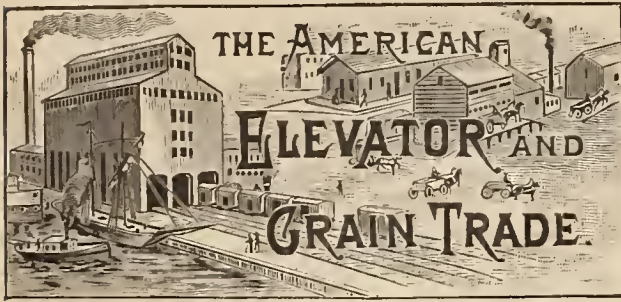
	1891-92.	1890-91.	1889-90.
St. Louis	26,084,000	11,653,000	14,317,000
Toledo	20,027,000	5,651,000	6,291,000
Detroit	7,619,000	4,836,000	5,406,000
Kansas City	15,704,000	6,894,000	5,516,000
Cincinnati	2,441,000	1,199,000	1,554,000
Winter wheat	71,875,000	30,233,000	33,084,000
Chicago	46,259,000	14,765,000	19,311,000
Milwaukee	12,691,000	7,714,000	7,462,000
Minneapolis	67,268,000	48,285,000	45,109,000
Duluth	48,719,000	17,668,000	18,379,000
Spring wheat	174,907,000	88,432,000	90,261,000
Winter wheat	71,875,000	30,233,000	33,084,000
Total, 52 weeks	246,782,000	118,665,000	123,345,000

## RANGE OF PRICES AT CHICAGO.

The daily range of prices of grain for July delivery at Chicago since June 14 has been as follows:

JULY.
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— PUBLISHED ON THE FIFTEENTH OF EACH MONTH BY —

## MITCHELL BROS. COMPANY.

(INCORPORATED.)

— OFFICE —

Howland Block, 184 and 186 Dearborn St.,

CHICAGO, ILL.

Subscription Price, - - - \$1.00 per Year

English and Foreign Subscriptions, - - 1.50 " "

English and Foreign Subscriptions may be sent to W. H. Smith & Son, 186 Strand, London, W. C., Eng.

A. J. MITCHELL, - - - Business Manager.

HARLEY B. MITCHELL, - - - Editor.

### ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

### CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., JULY 15, 1892.

## THE CENTENARY OF CANALS.

It is just one hundred years ago since the first two canals in the United States were constructed. They were both in Massachusetts and were built to avoid the rapids at South Hadley and the Montague Falls on the Connecticut River. At the present time, when the public mind has grown apathetic on the subject of maintaining our old waterways it is well to pause and reflectively survey the record which our canals have made.

The principal artificial waterway in the country, the Erie, was begun in 1817 and completed in 1825. Its original cost was \$8,000,000, but since its completion the state of New York has spent almost \$90,000,000 in its improvement and maintenance. It would seem that this was a heavy burden on the state, but notwithstanding, the canal has yielded over \$123,000,000 to the state, leaving a profit on the investment. The Erie represents about one-tenth of the mileage of the canals of the country, and its history is largely repeated in the others. Some have been abandoned, others are neglected; and yet plenty of projects for new canals are continually agitated.

This fact is the gist of the whole matter. It is true that the development of the country has rendered some canals only partially useful, like the Illinois & Michigan Canal, which would be an imperial highway of commerce if extended to the Mississippi and deepened and widened. But the demand for new canals shows that while the public is apathetic on the subject of the old waterways, it understands fully the part canals play as regulators of freight rates. It is not reassuring to find that the Erie still fares so badly at the hands of railway competition; but one reason is that while it is a state affair it is the roadway of interstate commerce. The future of the Erie looks dark; but it is to be hoped the

people will not allow it to fall into disuse through apathy; for the railroads have not reduced rates through love of the shippers, but through stress of necessity.

## EXPORTS FOR THE CROP YEAR.

The crop year of 1891-92 will long be a memorable one in the history of our export grain trade and especially of our export wheat and flour trade. The value of the breadstuffs exported was \$288,925,000, against \$123,156,520 for the preceding crop year. The breadstuffs exported during the six months ending with June were valued at \$132,935,807, against \$68,350,307 for same months of 1891. The exports during June were valued at \$16,448,977, against \$13,199,536 for the preceding June.

The amount of wheat exported was 152,803,086 bushels. This amount has been exceeded only once. In 1879-80 153,252,795 bushels were exported and the next crop year 150,565,477 bushels were exported. The record of these two crop years had not been approached until 1891-92 was closed. In 1890-91 only 54,201,282 bushels were exported. The amount of wheat exported in the form of flour during the crop year just closed exceeds all previous years. Granting that  $4\frac{2}{3}$  bushels of wheat are used to make a barrel of flour our wheat exports for 1891-92 are swelled to 221,685,228 bushels, or 35,209,977 bushels in excess of the amount exported during any previous year.

The corn exports were also heavy, but not as large as during several crop years that preceded it. During the crop year 73,770,002 bushels, valued at \$40,623,682, were exported, against 29,894,380 bushels, valued at \$17,124,370, during the preceding crop year.

Of barley we exported 2,799,729 bushels, valued at \$1,751,257, against 966,079 bushels, valued at \$664,708, during the crop year of 1890-91.

The exports of oats were also much larger than usual, 9,018,404 bushels, valued at \$3,679,109, being exported during the crop year, against 916,323 bushels, valued at \$389,078, during the preceding crop year.

The exports of rye were a surprise for every one connected with the trade, 11,827,044 bushels, valued at \$11,264,693, being exported, against 332,739 bushels, valued at \$212,161, the preceding crop year.

Although the export business was good from the start, few of those connected with the trade have derived much profit from their year's business. Since last harvest the price of wheat has been continually declining, so that any who held that cereal, even for a short time, suffered a loss. British importers have probably suffered greater loss than any others, but American dealers have also suffered.

## THE STATUS OF THE HATCH BILL.

The Senate Judiciary Committee reported back the Hatch Bill to the Senate without recommendation, on July 7. Three of the Senators on the committee, Pugh, George and Coke, reported amendments designed to eliminate the revenue features of the bill. One amendment is rather funny, in the light of Senator Washburn's championship of the bill. If carried it would effectually prevent him from selling flour for future delivery unless he already had the flour or grain on hand.

On July 11 the junior Senator from Minnesota made his long-promised speech. It was the same kind of a speech that was once heard on the Lake Front in Chicago. Like Kaiser Wilhelm, the Senator from Minnesota said that if people did not like the Hatch Bill they could go to Canada. He scored the Chicago Board of Trade and held its iniquities up to view in a way that somehow impressed the hearer or reader that the worthy Senator had experienced bad treatment at its hands. For instance, that the Chicago short seller had made the market go down, when the Senator had thought it ought to go up.

The upshot of it all was that on July 12 a mo-

tion was made to take up the Anti-Option Bill and places it under the head of "unfinished business." But this was really a setback, for another motion was made to proceed to the further consideration of the Sundry Civil Appropriation Bill, which being carried sent the Anti-Option Bill to the rear, from which position only a vote of the Senate can take it.

Evidently the Senators do not want to consider the bill; but if it is brought up a majority will no doubt vote for it for the sake of the "farmer vote." President Harrison will hardly veto the bill, if it comes to him with the approbation of both houses.

## CARRIERS SHIRKING LIABILITY.

The National Transportation Association and the many other organizations which have been working to secure an equitable uniform bill of lading have either been asleep or their influence with Congress is nil. The House Committee on Interstate and Foreign Commerce has reported favorably upon one needed reform in regard to bills of lading, and as carriers as well as shippers are in favor of uniform bills of lading, it is puzzling to understand why some action has not been recommended to bring about the adoption of a uniform bill of lading.

This committee has favorably reported a bill which makes it unlawful for any common carrier, either by land or water, to insert in any bill of lading or shipping document any clause or agreement whereby the carrier shall be relieved from liability for loss or damage arising from negligence or failure in proper loading of any property committed to its charge, or to limit its liability to less than a full indemnity for any loss or damage incurred.

Although the courts have frequently decided that carriers can gain nothing by giving shippers bills of lading in which carriers are relieved of liability, yet some of them have persisted in compelling shippers to accept such bills or nothing. By suit at law shippers can now obtain damages, bills of lading to the contrary, but as soon as the proposed law goes into effect they can also prosecute carriers for offering such bills of lading. The passage of the bill can be aided by personal letters to your representatives in Congress. Write to them.

## DAMAGES FOR DELAYING GRAIN.

Another suit has grown out of the general delay of grain shipments caused by carriers last year. We are surprised that more were not instituted long ago for many shippers were entitled to damages and could easily have procured them. The present case is not for damages resulting from delay in transit but it amounts to the same thing, the grain having been delayed in elevator at point of shipment long after the carrier contracted to transport it.

The suit referred to is that of the Miller Grain and Elevator Company against the Louisville, Evansville & St. Louis Consolidated Railway Company, brought in the Circuit Court at St. Louis to recover \$3,000 damages for a breach of contract. The grain company states in its petition that on Nov. 4, 1891, it entered into a contract with the railway in which the latter agreed to transport 100,000 bushels of wheat from East St. Louis to Norfolk, Va., at 19 cents per 100 pounds, including elevator charges; that after it had purchased the wheat and agreed to sell the same to Osborne & Bro., the railroad failed to supply transportation; that a large portion of the grain remained stored in the "Union Elevator," and that the plaintiff was compelled to pay the storage charges.

The grain company had to pay for the delay, so do shippers who apply for cars, when their elevator is full, without obtaining them. They have to pay dearly for it too because they cannot continue business until they have room to receive grain. In this case, however, the carrier had contracted to take the grain, so will find it a very difficult matter to get out of paying damages. Every carrier should be required to make



good to shipper the loss occasioned by carrier's delay or else pay a stipulated charge per day for delaying grain.

### AN ELEVATOR "PLANK."

The People's party of Minnesota at its recent convention formulated a platform setting forth its views on most of the questions of the day. With its political pronouncements this journal has nothing to do, but its so-called "wheat plank," touches the grain trade and is therefore legitimate ground for discussion in these columns, as well as by the thoughtful people of Minnesota, who should hesitate before they embrace measures savoring of state socialism and class legislation of an odious kind.

The "wheat plank" starts out with a reiteration of the falsehoods contained in the minority report of the late legislative committee. It asserts that the price of wheat is arbitrarily fixed by a combination reaching from Minnesota to Liverpool and Continental Europe; and moreover that this combination is so strong that "all the national laws of supply and demand are ignored," which would be a serious statement were it not ludicrous. "Therefore," says the platform—but we will quote the rest of this decidedly knotty plank:

Therefore we invoke the power of the state, and ask our next legislature to make sufficient appropriation for the erection of elevators at deep water on Lake Superior where grain can be stored, unmixed, at a nominal cost by individual producers awaiting sale and shipment to the markets of the world. We call attention to the report of the chief inspector, which shows that over \$80,000 of a surplus has accumulated from the weighing and inspection of grain. We ask that this fund be applied to this purpose. We also ask that whatever change is made in the grain laws that the inspecting and weighing of grain by the state shall be extended to the country stations. It is of the utmost importance to the wheat producers of this state that all farmers have equal facilities for reaching the tracks of railroads at country stations and that a law be passed making it the duty absolute of every railway corporation, company or association now or at any future time operating a railroad or acting as a common carrier, to furnish sidetrack facilities for erection of private elevators or warehouses of a capacity of not less than 5,000 bushels each for the storage of grain awaiting shipment on such line of railway, and to permit and allow such elevators to be erected and controlled by any person, association or corporation desiring to erect, maintain, control and operate the same for said purpose, and further making it the duty of such railway to receive, transport and carry over its line promptly all grain offered for shipment in car lots without previous storage and as offered.

If the framers of the plank actually believe that the grain men, millers, elevator men, railroads, steamship lines and commission men from the Red River to Liverpool are all in a great combination to fleece the farmer, the demand for state elevators might easily be pardoned. But the promise is all assumption and nothing else, and the demand based upon it becomes ludicrous. A state official at every country station would, indeed, be a tax that the farmer would hasten to rid himself of, while state elevators where grain could be "stored unmixed, at nominal cost by individual producers, awaiting sale and shipment to the markets of the world," would be class legislation of an extreme order which other citizens would not tolerate and which would involve an expenditure of state funds which the wise-actors who framed the plank did not count on. There exists no good reason why the state should provide storage for unmixed grain in individual lots until the price to be obtained suits the farmer, that will not apply to every other form of production. Nor should the state provide elevators to hold the farmer's wheat until it becomes dear any more than it should provide them for millers and grain men, to allow the latter to buy when grain is cheap and keep it until it becomes dear.

The demand for greater facilities at country stations may be justified in part, but the lack of facilities is largely due to the newness of the country and of the railways as well. Such complaints are not made in the older states to the extent of becoming a public question. To make the railways build a sidetrack to every grain bin and afford exactly similar accommodations to the legitimate grain dealer, established at his station, and the occasional shipper or farmer would be to

invert commonly accepted ideas both of ethics and business policy. This is what the "promptly" in the plank means. It is that the railroad must ignore its regular patrons, drop its regular business and transport the carload lots of the individual farmers.

No railroad in the Northwest would be able to transport all the grain "promptly," just after harvest. No railroad anywhere could afford to keep such an equipment for the business of a couple of weeks, and if they could there would not be terminal facilities to handle and store it. And even if these were provided by the state at public expense, the dumping of the whole wheat crop on the market at once would be the worst thing that could happen to the farmer. As matters are now speculative capital carries stocks of wheat far in excess of actual consumptive demand. And yet these cranks not only propose to make it impossible for speculative capital to carry grain, but to dump the whole crop on the market, or put it in sight at once. Where would the price go to? The Minnesota People's party is not composed of Solomons.

### A REQUEST.

Elsewhere in this issue we publish "A Protest, A Petition," which we earnestly request every grain shipper to sign and mail to us, and as soon as we have received a number of signatures we will mail a copy to the traffic manager of each railroad company. Every year the grain trade has experienced several serious and expensive blockades and delays, and it is not probable that the coming crop will be marketed without a repetition of past experiences, yet the trouble can be greatly alleviated, and we feel confident that traffic managers will give the petition their attention.

The one-sided demurrage charge is a wrong of long standing, which some traffic managers have already acknowledged as unfair. If shippers are to be charged for delay of cars carriers should be charged for delay of grain. Like other agreements, those made for the shipment of grain should not be jug-handled contracts. Neither party should be required to be prompt unless the other is. No railroad champion has ever maintained that the demurrage charge is fair or just, and no logical arguments to that effect can be brought out.

No grain shipper can have good cause for not signing the petition, and all should be anxious to do so.

### SOME MORE FARMERS' ELEVATORS.

News comes from Grand Forks, North Dakota, that the Farmers' Protective Elevator Association of that state has decided to erect a large storage elevator of 500,000 bushels' capacity at West Superior, Wis. A committee was appointed to secure a suitable site, this action being taken to give farmers the supposed benefit of direct shipment to Liverpool. Some time ago this same association entered into a contract with the officials of the Great Northern and Northern Pacific Railways, by which they secured control of a large number of elevators and warehouses, the association to build new ones wherever there was demand for them, on the lines of these roads.

While this journal has never had much confidence in co-operative effort on American soil, chiefly for the reason that the people who embark in such enterprises rarely know anything of the business in question, we commend this move as the one to be made by farmers who feel themselves aggrieved. If, as is so commonly asserted in the Northwest, the profits of the grain business are enormous, why should not the farmer reap them by going into the business himself? This is the only logical way of righting the alleged wrong; and according to the farmer's way of seeing things, it would be a very profitable way, as well. It is infinitely superior to demanding that state legislatures regulate everybody's business but the farmer's, in the farmer's interest. We have little doubt that an experience with the grain business will convince the farmers that it is not what it is

cracked up to be, but the farmers who try the experiment will have the satisfaction of knowing that they went at the matter in a practical, sensible, businesslike way, and paid for their experience out of their own pockets instead of asking the state to foot the bill.

### THE CANADIAN CANAL TOLLS.

It seems that the whole controversy between this Government and that of Canada on the alleged discrimination in rebates on canal tolls, against this country, originated in a mistake. Now that the mistake has been discovered the Canadian Government has expressed its entire willingness to remove any semblance of discrimination against Americans or American vessels. The discrimination complained of by President Harrison in his message to the Senate was this: Grain entering the Welland Canal and passing down the St. Lawrence on its way to Montreal was not given the rebate of 18 cents per ton. Grain breaking bulk at Ogdensburg was thus discriminated against to the extent of 18 cents per ton, as compared with grain transshipped at Kingston. Any fair construction of Clause 27 of the Washington Treaty would treat all grain passing through the canals down to Montreal on precisely the same terms.

It now appears that by some oversight the order in council of the 4th of April last, which renewed the rebates granted the previous years on Welland Canal grain tolls, had been printed so as to make one of the clauses read: "The right to this rebate shall extend to any portions of cargoes lightered at Port Colborne and reshipped at Port Dalhousie and also to shipments of the above named products made from any Canadian Lake Ontario port." The word "Canadian," the Ottawa Government admits, was inserted by mistake; and the only contention now made by the Canadian authorities is their right to discriminate in favor of grain destined to a Canadian port, which right, of course, will hardly be called in question. So the whole difficulty may be regarded as settled.

### REPLY TO NORTH DAKOTA'S RAILROAD COMMISSION.

The North Dakota Railroad Commission in its last report went a long distance out of its way to play the part of farmer agitators, and the prospect is that its political buncomb will do the members more harm than good as the elevator men of the Northwest have been aroused to action, and have prepared a reply to the commission showing conclusively that its decisions and statements are not tenable.

The commission charges that the farmer has not been paid within several cents of what his grain was worth, and maintains that wheat is being exported to Liverpool at a profit of 30 cents per bushel. It seems as though the commission had accepted these statements from an agitator's sheet without investigation and without proof and published them as its own. Any demagogue who is fool enough to try to run a paper or a railroad commission when he can make 30 cents a bushel by handling wheat is too far gone to be allowed his liberty, if the safety of the public is to be considered. The unprincipled demagogues may be able to make a profit of 30 cents a bushel for themselves if allowed to ship the farmers' wheat to Liverpool, but they can not realize near as much for the farmer as the experienced dealers of the Northwest have been paying him.

The elevator men also deny the right of the commission to declare every dealer who buys and stores his grain in his warehouse a public warehouseman. We have shown repeatedly that no state has the power to compel a man running a warehouse for his private business to open it for the use of the public. Such confiscation is championed by few persons not anarchists and would be upheld by no court in this country.

The reply which has been printed for general circulation is full of facts showing that the charges of the commission were based on pure fiction, and that the farmer is being paid every cent the market warrants.



# EDITORIAL

## MENTION

THERE is no short-selling Pardridge in the cotton business, and yet cotton persistently has tended downward.

THE demand for harvest hands in Kansas is greater than ever before, yet tramps in that state continue to plead that they are rainmakers out of work.

IN spite of the black eye which the Anti-Option Bill has received, Senator Washburn announces that he will get it before the Senate if he keeps that body in session all summer.

THE Chicago police department has commenced war on the bucket shops. One day recently sixty-two keepers and employes were arrested, but several hundred patrons were permitted to go free.

CARRIERS continue to kick against a claimed grain blockade at Kansas City. If they allowed a small amount for delaying grain in transit shippers would not object to being charged a like amount for delaying cars.

THOSE who have eyes to see can probably explain why news favorable to the passage of the Anti-Option Bill makes wheat and cotton go down, while news that it is not likely to pass causes those staples to rise.

PARTS of Texas, in common with other portions of the South, are claiming that the yield of corn this year will be the largest in fifteen years. The yield of oats in Texas was enormous. The weather's favors this year have been very unequally divided.

MERCHANT & Co. of Philadelphia have been instrumental in putting a new tin plate machine on the market and hereafter they propose to make their best plates and stop importing. They claim to have succeeded in getting a better article than they have ever imported.

WITH this issue the Stevens Manufacturing Company of Peoria, Ill., for the first time makes known to our readers its ability to supply them with everything in the line of mill and elevator machinery. Their new oat clipper and other machinery is claimed to be equal to the best on the market.

AT the annual meeting of the Illinois Grain Merchants' Insurance and Protective Society held in Springfield the following officers were chosen for the ensuing year: President, F. M. Pratt, Decatur; vice-president, Edwin Beggs, Ashland; secretary, T. P. Baxter, Taylorville; treasurer, E. F. Norton, Tallula.

THE lot of the country elevator man will soon be made miserable by the scalper who buys grain in Missouri to-day, steals grain in Kansas tomorrow, and resorts to all kinds of trickery and fraud. The farmer blames the class with all the meanness of these irresponsible, traveling scalpers. The regular dealer suffers accordingly.

PRESIDENT EVAN THOMAS of the Produce Exchange in New York believes that the Hatch Anti-Option Bill will injure the farmer more than anybody else, in that it will practically prevent any dealing in grain except between the farmer and the miller. A farmer can now sell his grain even when the miller does not want it, because somebody else thinks the miller is going to want it, and is willing to take the chances. He winds

up a statement of his views of the matter with the following rather forcible question: "How is it going to help the farmer to get better prices for his produce if the man whose price isn't good enough for him is prevented from offering any price at all?"

IT is denied that there has been any grain blockade at Montreal. Officials state that the total quantity of low grade Manitoba grain now stored in the elevators is only 30,000 bushels, which is no worse than in former years. They say that the percentage of low grade grain out of a total of 15,000,000 bushels is, in reality, very small.

KANSAS farmers will not have time to listen to the calamity howlers this year. In addition to their large wheat crop they will have a large crop of corn and oats. Some of the Southern states notably Texas and Georgia will have a larger crop of corn than usual. In Iowa and Illinois the corn crop is way behind the season and many fields have been abandoned.

A KENTUCKY paper says, "They burned the elevator at St. Mary's July 4 for fireworks. A big time is reported from there." When the business men of St. Mary's feel the need of another elevator to attract the farmer's trade to their town they may find it a difficult matter to convince the grain dealer that it would be a safe investment.

WANTED, a person or persons to erect and operate modern grain transfer elevators at Buffalo, N. Y., for the purpose of transferring grain from lake vessels to canal boats. No person who can be bought out, bribed or bullied need apply. Any one who will be satisfied with the legal rate of  $\frac{3}{8}$  of a cent per bushel can, without doubt, secure assistance and business from the Erie Canal boatmen.

THE elevator pool at Buffalo has been petitioned to reduce the charge for transferring grain from lake vessels to canal boats to  $\frac{3}{8}$  cents per bushels but have made no reply and cannot be expected to make any. The canal boatmen are the only ones that would be benefited by a reduction and they are the enemies of the pool's masters—the rail carriers, so no favors will be granted by the pool.

IT is reported that the Mexican Government has announced the exemption from import duties of corn, corn products and beans imported through the Mexican maritime and frontier custom houses during July and August. Kansas has much of the last crop on hand, and if in good condition much of that needed will be supplied from that state. The no grade corn, of which there is so much, could not stand the trip.

SEVERAL years ago a North Dakota correspondent of the AMERICAN ELEVATOR AND GRAIN TRADE suggested that large terminal storage elevators be fitted with small bins, each capable of holding one carload, the object being to furnish storage for short periods and preserve the identity of the grain. The plan was discussed at the time and no weak spots exposed, but no one acted upon the suggestion. It is now reported, however, that one will be built on this very plan at Kansas City. If it proves a success others will soon be erected at other terminals.

WE have recently been informed by a reliable person, who was not prompted by prejudice, that each elevator company doing business at Chicago has a list of the country elevators with capacity of house, description of weighing facilities and capacity of hopper scales used in weighing shipments, and that in considering a shipper's complaint of shortage, they are guided principally by his facilities for weighing. It may be that some of them are guided by the same list in docking receipts for future shrinkage. There

are a number of good reasons why every elevator should be provided with superior facilities for determining and recording correct weights, of which obtaining fair and just treatment at terminals is not the least.

THE Commercial Exchange of Kansas City has decided to place its own seals on all cars broken open by its grain inspectors. At every terminal grain has been stolen from cars left open by the inspectors. Some of the carriers have taken the precaution to have cars resealed as soon as grain is inspected, but many do not and the owner of the grain suffers accordingly.

THE weighing of grain at Kansas City which heretofore has been conducted by so many different parties as to cause confusion and trouble has been placed in the hands of disinterested parties. Hereafter all weighing on the Missouri side of the river will be done by the Western Weighing Association. This is a great improvement over the old plan and should prove far more satisfactory to shippers and receivers.

THE out inspection of low grade wheat at Minneapolis has been unsatisfactory to the private elevator men for some time. They claim that the inspection department has raised the standard on low grade wheat in store and that the inspection of it is more rigid than that on track. They maintain that much of this wheat has been placed in grades lower than it merited and have appealed to the warehouse commission.

NEW YORK railroads continue to indulge in the expensive pleasure of driving nails in the coffin of the Erie Canal. Recently they were taking grain from Buffalo to New York at  $2\frac{7}{8}$  cents per 100, paying charges at Buffalo and guaranteeing weights. The roads are not supposed to be deriving any profit from the business, but they are leaving little grain to be transported by canal and are thereby hastening the end of the grain rate regulator.

THE spring wheat that remained in the stack during the winter is not turning out near as well as was expected. Minneapolis elevator men have had much trouble with it and much has been shipped to Montreal that will not bring the freight charges. Several dealers have lost so heavily on it that they have refused to buy any more. Some of the farmers are holding it to mix with this year's crop, so dealers will have to keep their eyes open when buying.

THE members of the St. Louis Merchants' Exchange have decided to move cautiously in the matter of purchasing the building in which they do business until they feel assured as to the fate of the Hatch Anti-Option Bill. One trouble is that no matter what the fate of the bill is in the present Congress, future bodies are quite likely to have their full quota of Hatches and Washburns, who will menace business for the sake of currying favor with the almighty farmers' vote.

MR. CHURCH of the Duluth Imperial Mill denied before the Interstate Commerce Commission that his mill profited to any extent by the alleged discrimination in favor of Duluth. On the contrary, he said his mill usually paid more for wheat than the Minneapolis prices, since he would not use the wheat sent into Duluth, as it was doctored so as to just pass muster. The grain men have a vital interest in this controversy between the millers of Minneapolis and Duluth and Superior.

FARMERS in Southern Wisconsin are being swindled by a gang of seed grain peddlers. It is the same old game that has been exposed so often. They claim to have a sample of oats for seeding purposes that excels anything in the market. A big price is charged for the seed, and the seller insists on contracting for a part of the crop. When the farmers learn to buy seed from the reliable elevator man at their home market



they will get what they pay for. The elevator man is directly interested in their having good grain to market and will sell them nothing he is not sure is good.

EVERY one connected with the grain trade at Kansas City is making preparations to handle the enormous wheat crop of Kansas, conveniently and expeditiously. The inspection force has been increased, and even the railroads are increasing their facilities in hope of preventing a blockade.

SOME of the railroads are repairing their cars so they will be in fit condition to ship grain in. All should be required to do so. Too often does a crack or hole in a car escape the eagle eye of the loader, and the shipper suffers accordingly. It is the duty of carriers to supply good cars. If they will not do it, let them bear the loss due to poor cars.

THE Buffalo-New York route for export grain will soon have a strong competitor for lake shipments if the present intentions of the Erie & Western Transportation Company and the Pennsylvania Railroad Company are carried out. The transportation company has just negotiated a mortgage for \$1,200,000, which it will spend in the erection of a large grain elevator and freight house at Erie, Pa. This company has a line of good boats and will make a vigorous effort to secure a large part of the lake grain trade for Erie. Even if the Buffalo pool does wage war on this route much grain will go by way of it.

H. H. SPENCER has been appointed agent of the Interstate Wheat Growers' Association with headquarters at Cairo, Ill. This is the organization to which reference has been made in these columns. He reports that he has already sold and shipped over 30,000 bushels of wheat of the crop just harvested. The experiment of having a selling agent with practically no check on his action will be watched with interest. It looks to disinterested people as if the members of the association did not have the requisite business sense to conduct their own affairs and were so painfully conscious of the fact that they wished to commit themselves to a guardian without recourse.

RAILROAD companies are supposed to provide good cars for the transportation of grain and to give the traffic some care; yet they seldom do it. Repeated complaints of shortages in shipments from Kansas City to Southern ports brought about no action on the part of the carriers, so the shippers finally took up the matter and learned that carriers were entirely to blame. The heaviest shortages occurred in shipments that were transferred at Memphis, where \$1.25 is paid for shoveling grain from one car to another, and no lumber is provided for patching and repairing cars. Much grain had been placed in cars that were not in fit condition to receive it. Placing cars on unguarded tracks and the old style scales in New Orleans elevators are also given as causes of shortages. Carriers depend too much upon low rates and hustling agents to secure business. Satisfactory service would be more influential than either.

THE Interstate Commerce Commission has recently rendered a decision regarding discrimination in favor of one place to overcome the natural advantages of another that can be applied with equal force to the discriminating rates now granted to a number of places. The commission held that "rates should be fixed in inverse proportion to the natural advantages of competitive towns, with the view of equalizing uncommercial conditions as they are sometimes described, is a proposition unsupported by law and quite at variance with every consideration of justice. Each community is entitled to the benefits arising from its location and natural conditions. And the exaction of charges unreasonable in

themselves or relatively unjust by which those benefits are neutralized or impaired, contravenes alike the provisions and the policy of the statute." Traffic managers should paste this in their hat and follow it.

It is well known that much of the trouble regarding short weights is due to error in recording weights. Seldom is it due to error in weighing. To overcome this difficulty a number of elevator companies have fitted their scales with the Demuth Check Scale Beams at an expense of \$75 to \$85 per scale. Demuth's New Cipher Beam which is just as effectual can be obtained for about one-tenth the cost. No elevator man can afford to have weights recorded on the single entry system. With either of the Demuth Beams record can be made which is correct and will prove itself.

THE Interstate Commerce Commission is hearing at Chicago the complaints of a number of grain shippers of Illinois, Iowa, Nebraska and Kansas against the managers of several roads. The complainants claim to have proof that the roads have given advantageous rates to Reynolds Bros., and Paddock, Hodge & Co. of Toledo, Gill & Fisher of Baltimore and to others. Gill & Fisher have been repeatedly charged with securing better rates than other shippers could get. The fact that they have been able to pay far better prices than other shippers has caused competitors to be very observing, and they have accumulated evidence which they are confident will convict.

THE repeated complaints of wrong grading at Port Arthur and Fort William will probably bring about radical changes in the grain inspection at these points. The trade has been thoroughly aroused against the abuses and will not rest until changes have been made which will bring about satisfactory service. The inspection department and its work should be thoroughly investigated, and if the charge that certificates of inspection have been issued without inspecting the grain is found to be true, all the guilty parties should be summarily dismissed. If the charges are not true shippers should in justice to the trade of these ports be so informed so that they will not continue to send their grain elsewhere.

THE bull speculators have lately been vigorously denouncing the Government crop reports as being unreliable and detrimental to the business interests of the country, yet at the same time their actions plainly show they consider the Government crop reports nearer the truth than their own private advices. It must not be expected that all will agree as to the average condition of the crops of the country at any one time. The speculators always exert themselves to distribute the news favorable to their side of the market. The Government is a disinterested party and its reports are of great advantage to grain dealers, few of whom do not consider it far more reliable than the information sent out by private parties.

MINNEAPOLIS has no grain transfer elevators so the storage elevators get this business. Last fall those controlling storage elevators agreed to charge  $\frac{3}{4}$  of a cent per bushel for transferring grain from car to car. This price was maintained until business fell off, when several took to quietly cutting prices. Two of the companies decided to meet the cut openly and have given notice that they will transfer grain for  $\frac{1}{2}$  cent per bushel. This makes the charge for transferring range from \$2 to \$5 per car, which is too much. A good transfer elevator can transfer grain for \$1 per car and make a good profit. Few are the storage elevators that cannot easily be fitted to transfer grain from car to car at  $\frac{1}{4}$  cent per bushel and still make a good profit for the owner.

## Grain Dealers' Associations.

### ILLINOIS GRAIN MERCHANTS' INSURANCE AND PROTECTIVE SOCIETY.

*President*, F. M. PRATT, Decatur; *Secretary*, T. P. BAXTER, Taylorville; *Vice-President*, EDWIN BEGGS, Ashland; *Treasurer*, E. F. NORTON, Tallula.

### GRAIN DEALERS' ASSOCIATION, OF OHIO.

*President*, E. W. SEEDS, Columbus, O.; *Vice-President*, Z. H. TRAVIS, Reese's; *Secretary*, J. W. McCORD, Columbus; *Treasurer*, GEO. T. CHAMBERLAIN, Columbus.

### STATE GRAIN DEALERS' ASSOCIATION OF TEXAS.

*President*, S. F. McENNIS, Dallas; *Vice-President*, E. EARLY, Waco; *Treasurer*, J. P. HARRISON, Sherman; *Secretary*, G. D. HARRISON, McKinney. *Directors*, J. F. McENNIS, J. P. HARRISON, E. EARLY, S. E. McASHAN of Houston and C. F. GRIBBLE of Sherman.

### NEBRASKA GRAIN DEALERS' ASSOCIATION.

*President*, C. H. FOWLER, Omaha; *Vice-President*, W. H. FURGESON, Hastings; *Treasurer*, N. A. DUFF, Syracuse; *Secretary*, F. C. SWARTZ, Omaha; *Directors*, C. H. FOWLER, W. H. FURGESON, N. A. DUFF, H. O. BARBER, F. L. HARRIS, G. W. WIRT, J. W. PERRY, J. A. CONNOR and F. C. SWARTZ.

### GRAIN DEALERS' AND MILLERS' ASSOCIATION OF THE CUMBERLAND VALLEY.

*President*, S. C. WAGNER, Newville, Pa.; *Secretary*, JOHN A. MILLER, Oakville, Pa.; *Treasurer*, D. H. MILLER, Oakville, Pa.; *Executive Committee* J. K. BEIDLER, Oakville, J. W. SHARPE, Newville; U. G. BARNITZ, Barnitz; H. K. MILLER, Huntsdale, and J. H. BRINKERHOFF of Walnut Bottom, Pa.

### GRAIN SHIPPERS' ASSOCIATION OF NORTHWEST IOWA.

*President*, T. M. C. LOGAN, River Sioux; *Vice-President*, H. HANSEN, Odebolt; *Secretary and Treasurer*, F. D. BABCOCK, Ida Grove; *Assistant Secretary*, F. G. BUTLER, Schaller. *Executive Committee*, E. A. ABBOTT, Des Moines; J. Y. CAMPFIELD, Sac City, and T. M. CATHCART, Kingsley.

## DOTS AND DASHES.

Kansas is harvesting the largest crop of wheat she ever produced. The men who farm for profit are getting in the grain, while the men who farm for politics are getting in the soup.

Kansas City received in twelve months ending with June, 29,583 earloads of wheat, 18,576 of corn, 5,214 of oats, 2,323 of rye, 436 of flaxseed, 687 of bran and 3,089 earloads of hay.

The stocks of grain in Chicago elevators last Saturday evening, July 9, were 4,678,000 bushels of wheat, 4,118,000 bushels of corn, 1,470,000 bushels of oats, 100,000 bushels of rye, and 22,000 bushels of barley. Total, 10,388,000 bushels of all kinds of grain, against 2,431,362 bushels a year ago.

Our imports of breadstuffs in May were, in bushels: Barley 75,071, corn 36, oats 3,787, rye none, wheat 221,341, and wheat flour 117 barrels; against, for May, 1891, barley 130,015, corn 180, oats 1,223, rye 15,308, wheat 129,297, and wheat flour 465 barrels. In the eleven months ending with May we imported 3,106,817 bushels of barley, 15,250 of corn, 18,733 of oats, 83,529 of rye, 2,183,832 of wheat, and 577 barrels of wheat flour, total value \$4,386,717; compared with 5,067,462 bushels of barley, 1,951 of corn, 8,509 of oats, 140,687 of rye, 524,731 of wheat, and 7,702 barrels of wheat flour, total value \$4,398,752, in the corresponding eleven months ending with May, 1891. Of imported breadstuffs we exported no barley, corn, oats or rye, 57,587 bushels wheat, and no wheat flour; against 25,906 bushels barley, no corn, oats, rye or wheat, and 1,173 barrels wheat flour in May, 1891; and for the eleven months ending with May 504,301 bushels of barley, 9,731 of corn, 6,966 of oats, 16,172 of rye, 1,561,096 of wheat, and 102 barrels of wheat flour, total value \$1,576,591, compared with 99,175 bushels of barley, no corn, no oats, 106,111 of rye, 453,553 of wheat, and 7,531 barrels of wheat flour, valued at \$555,709, exported in the corresponding period of 1890-91.



# ELEVATOR

## GRAIN NEWS

Owasso, Mich., wants a grain elevator.

An elevator will be built at Anthony, Ill.

An elevator is to be built at Rosedale, Kan.

A grain elevator will be built at Uniontown, Ky.

A cleaning elevator will be erected at Durant, Ia.

The old elevator at Downs, Kan., has been torn down.

Frank S. Regar is building a brewery at Conshohocken, Pa.

A 60,000-bushel warehouse is to be built at Talmage, Ore.

A large grain warehouse is to be built at Memphis, Tex.

Work on the elevator at Seymour, Tex., is progressing rapidly.

H. S. Gilbert of Ottawa, Ill., will remodel his grain elevator.

The two new elevators at Harrold, Tex., have been completed.

The new grain elevator at Burleson, Tex., is about completed.

Johns' on & Lash have started their new elevator at Vermont, Ill.

G. T. Hodges is building a grain elevator at Kearneysville, W. Va.

A large force of men is at work on the new elevator at Farmersville, Ill.

C. W. Brown, grain dealer at Lovington, Ill., is putting in new scales.

A. Mitchell, dealer in grain, flour and feed at Burwell, Neb., has sold out.

The new Kellogg Elevator at Buffalo, N. Y., is rapidly nearing completion.

Grain shovellers at Kingston, Ont., are making from \$16 to \$20 per week.

Cooper & Plumb have bought the elevator of A. E. James at Chase, Kan.

Shaw & Walker, hay dealers at Schuyler, Neb., have dissolved partnership.

A steam engine has been placed in the new grain elevator at Seymour, Ind.

Carson Bros. have completed their new 30,000 bushel elevator at Miami, Man.

Shortages in cargoes unloaded at Buffalo, N. Y., are fewer than in past years.

An elevator has been erected at Sunnyside, Ia., on the B., C., R. & N. Railway.

John Templeton has started in the grain and lumber business at Webber, Kan.

A shoe factory at Randolph, Me., is being converted into a grain elevator and mill.

In two weeks recently the elevator at Elberon, Ia., received 28,000 bushels of grain.

S. Williams & Co., of Woodland, Ill., have placed a new iron roof on their elevator.

C. M. Rose & Son, dealers in grain and lumber at Cain, Ia., have dissolved partnership.

The Ogden Commission Company, dealing in grain and flour at Ogden, Utah, has failed.

Green & Co., grain commission dealers at Philadelphia, Pa., have dissolved partnership.

Appropriately enough, Grainfield, Kan., is preparing to build a 10,000-bushel elevator.

Preparations have been made to move the old "North-western Elevator" at Benson, Minn.

Reed, Long & Manning of Rippon, W. Va., are building a grain elevator at Charlestown.

Cowles & McKee, grain dealers and elevator men at Chicago, have dissolved partnership.

S. W. Strimple, dealer in grain at Greenwich, O., has been succeeded by Strimple & Viers.

The Union Elevator Company of Duluth, Minn., is about to make repairs costing \$5,000.

Schreiner, Flaek & Co. have completed their new 20,000-bushel elevator at Manchester, Mo.

Frank Kramer of Springfield, Ill., is building an elevator in connection with his flour mill.

Grossman Bros., dealers in grain and groceries at Garland, Tex., have dissolved partnership.

All the old wheat in the "Air Line Elevator" at Chicago is being emptied into vessels to make room for the

new crop. The "Galena Elevator" has just been opened for business.

R. F. Larimer is building a grain warehouse at Oakland, Ill., on the site of the old elevator.

An elevator of 30,000 bushels' capacity is being built at Walnut Creek in Barton county, Kan.

The Lake Superior Elevator Company of Duluth, Minn., will make some extensive repairs.

Weaver & Watkins are about to build an elevator at Milford, Mich., on the F. & P. M. railway.

William Rutz has gone into the grain trade at Pontiac, Ill., and contemplates building an elevator.

W. W. Cameron, dealer in grain, coal and lumber at Chester, Neb., has sold his lumber business.

The Kentucky Malting Company will rebuild its elevator at Louisville, which was recently burned.

Welles & Reyburn, grain commission dealers at Peoria, Ill., have been succeeded by W. T. Welles & Co.

The two elevators at Glenwood, Minn., have handled nearly 150,000 bushels of wheat the past season.

A 15,000-bushel elevator is being built at Lake Benton, Minn., by the Winona Mill Company of Winona.

A woman was arrested recently while stealing corn from the cribs of A. J. Bowers at St. Joseph, Ill.

A new elevator is talked of by the farmers at Alexander, Minn. E. A. Osterout is taking subscriptions.

J. J. Woodin of Champaign, Ill., received and shipped in one week recently 26 car loads of corn and oats.

Joseph Kraker, dealer in grain and hardware at Melrose, Minn., has sold his elevator to William Siems.

Mrs. Charles J. Furr, dealing in grain and owning a creamery at Eustis, Neb., has sold her grain business.

Grain dealers in Iowa are complaining that shelled corn in bins is heating and getting into bad condition.

R. P. Jennings, dealer in grain and lumber at Elk Creek, Neb., has been succeeded by J. L. Linn & Son.

A. F. Rickey, dealer in grain and livestock at Griswold, Ia., has been succeeded by Vanschoiaek & Rickey.

The Verdigre Grain and Stock Company is being organized in Knox county, Neb. Capital stock, \$20,000.

J. S. Rowe of Wilton, Ia., will soon add a gas engine to the power plant of his elevator and also put in a feed mill.

Wagar, Martin & Co., grain commission dealers at New York, N. Y., have been succeeded by J. M. Martin & Co.

The J. W. Booth & Sons Commission Company has been incorporated at St. Louis, Mo., with \$50,000 capital stock.

A quantity of barley lightered, July 1, from the stranded steamer Conestoga at Detroit was damaged by water.

An elevator is to be built at Kansas City, Mo., which will have a separate bin for each carload of grain received.

The National Rice Milling Company will enlarge its mills at New Orleans to three times their present capacity.

Messrs. Kingsford of Oswego, N. Y. will rebuild on the site of the "Marine Elevator," which was recently burned.

Norris & Carruthers, dealers in grain and flour at Toronto, Ont., and Montreal, Que., have dissolved partnership.

The Murray Iron Works of Burlington, Ia., has been awarded the contract for a refrigerating plant at Dunniog, Ill.

Gill & Fisher, the grain exporters of Baltimore, Md., have made, it is said, a profit of over \$400,000 in the past crop year.

John P. Truesdell & Co., grain exporters at New York, N. Y., have been succeeded by the John P. Truesdell Company.

Large quantities of grain are being delivered daily at Roland, Man., by the farmers, and buyers consequently are in clover.

An elevator is being built near Waitsburg, Walla Walla county, Wash., by a farmers' company. Mr. Hall has the contract.

Kendall & Smith's elevator at Lincoln, Neb., of which H. C. Ranch has charge, is doing a good business, especially in corn.

Grain trimmers at Toledo have reduced their wages from \$1.25 to \$1 per 1,000 bushels on account of the dullness in trade.

The American Brewing & Malting Company of Chicago will build an elevator and two-story malt house costing \$75,000.

The first car of new wheat received at Kansas City, Mo., arrived June 27, consigned to the Crescent Grain Company by Richmond & Swartzell, grain dealers at

Dover, Okla. Ter. It was of excellent quality, testing 60½ pounds, and was graded No. 2 Red.

Brown & Lubben, dealers in grain and wood at Alameda, Cal., have dissolved partnership.

A public cleaning and storage elevator will be built at Winnipeg, Man., if the efforts made by the Grain Exchange bear fruit.

The City Council of St. John, N. B., has appropriated \$150,000 towards the purchase of a site and the erection of a grain elevator.

Tipton, Ia., has two railroads and only one grain elevator which is so situated that grain can be shipped from it only over one road.

Harris & McLeod, grain dealers at Williamsburgh, Ia., have dissolved partnership, Mr. Harris purchasing the interest of his partner.

The Farmers' Alliance of the Palouse Valley of Washington will build a number of elevators this season and remodel some old ones.

Smith, Hammond & Co., who started in the grain export business at Baltimore, Md., a year ago, have made \$60,000 in the last year.

The Farmers' Warehouse Co. of Garfield, Wash., expects to ship 600,000 bushels of wheat this season, which will require 120,000 sacks.

The American Starch Works at Indianapolis, Ind., have completed their new four-story factory, thus doubling their former capacity.

Work has been commenced on the erection of Bateman & Chapman's elevator at Hartney, Man., which will have a capacity of 30,000 bushels.

Three hundred and fifty cars of corn were ordered June 18 by a party in Mexico of the Southern Grain Company of Kansas City, Mo.

The Murray Iron Works of Burlington, Ia., has been awarded the contract for building an artificial refrigerating plant for Cook county, Ill.

In the ten months from Aug. 1 to June 1, 790,561 bushels of wheat was marketed at the various elevators and mills in Genesee Co., Mich.

E. M. Castle of Reynolds, Ill., has recently bought a complete elevator outfit of the Barnard & Leas Manufacturing Company of Moline, Ill.

A. H. Mosher of Andalusia, Ill., has recently bought a complete elevator outfit of the Barnard & Leas Manufacturing Company of Moline, Ill.

J. B. Reeve of Garrison, Ia., has recently bought a complete elevator outfit of the Barnard & Leas Manufacturing Company of Moline, Ill.

D. A. Brooks J. & Co., of Sturgis, Ky., has bought a complete equipment of elevator machinery of the Barnard & Leas Manufacturing Company of Moline, Ill.

Since last fall the farmers in Brown Co., Ill., have been holding 100,000 bushels of wheat, waiting for the rise predicted by the hold-your-wheat circulars.

The "Cyclone Floating Elevator" at Buffalo, N. Y., is again doing business at the old stand. It has all the canal boat grain transferring it can handle.

The Illinois Grain Company has been incorporated at Chicago. Capital stock, \$10,000; incorporators, B. L. Thompson, A. L. Arragoni and Louis Zietz.

The elevators on the river bank at Burlington, Ia., were shut down June 28 on account of the high water of the Mississippi River, which filled the engine room.

C. E. Baylor of Summit Point, W. Va., has bought a complete equipment of elevator machinery of the Barnard & Leas Manufacturing Company of Moline, Ill.

Now that steamers will make regular trips to Sioux City the farmers of Charles Mix county, S. Dak., are building grain warehouses along the Missouri River.

The Empire Elevator Company of Minneapolis, Minn., is building a number of country houses along the main line of the Chicago, Milwaukee & St. Paul Railway.

Patent grain cars that can be unloaded in four seconds will be manufactured by a New York syndicate. A train of seven or eight cars can be unloaded in four minutes.

H. A. Carleton of Cawker City, Kan., has recently bought a complete outfit of elevator machinery of the Barnard & Leas Manufacturing Company of Moline, Ill.

John Perey of Pine Knob, Wis., has recently bought a complete equipment of machinery for his elevator of the Barnard & Leas Manufacturing Company of Moline, Ill.

The Interstate Wheat-growers' Association of Illinois, Missouri and Kentucky has appointed H. H. Spence president to sell wheat, with headquarters at Cairo, Ill.

Inkster Bros. & Co. have a big warehouse at Davenport, Wash., 57 miles by rail from Spokane, and do a heavy business buying and selling all kinds of grain the year around.

Last winter 750,000 bushels of grain passed through St. John, N. B., on its way to Halifax, N. S., for ocean shipment, although the freight had to be carried by rail 275 miles farther. A terminal grain elevator at St. John



would have changed all this and saved money to western shippers, besides being a profitable investment for the company building it.

G. W. Dockstader of Cawker City, Kan., has recently bought a complete elevator outfit of the Barnard & Leas Manufacturing Company of Moline, Ill.

Greenleaf & Baker of Atchison, Kan., in one day recently received over one hundred carloads of grain. C. E. Lathrop & Co. were compelled to run their elevator night and day.

L. J. Houch, dealer in grain and lumber; and Robert Fullerton, dealer in grain and live stock, at Webster City, Ia., have formed a partnership as the Houch-Fullerton Grain Company.

Capt. Ryan has started his new elevator at Buffalo, N. Y., and is endeavoring to induce shippers to transfer cargoes through his house. He will cut rates to get business, if necessary.

John Vallyelly, a trusted young man employed by A. S. White & Co., grain dealers on the Chicago Board of Trade, has fled after speculating with the firm's money and losing \$10,000.

Washington & French have started in the grain commission business at St. Louis, Mo. The senior member of the firm is Frank Washington, at one time assistant state grain inspector.

The government of Mexico has advertised for proposals for furnishing corn. Large quantities of corn are arriving on Gulf steamers, and will be distributed by the government at food depots.

The Kirkbride Palmer Grain and Commission Company has been incorporated at Minneapolis, Minn. Capital stock \$50,000; incorporators Geo. B. Kirkbride, W. H. Eustis and W. B. Palmer.

Having been refused permission to build on the right of way of the B. & M. Railway at Syracuse, Neb., the new Farmers' Elevator Company has appealed to the state board of transportation.

The old elevator of the Toledo & Ann Arbor Railway Company at Ithaca, Mich., is being moved to a new location, and when refitted will be operated by the Nelson-Barber Company of that city.

A. W. Randall, grain dealer at Conrad Grove, Ia., weighed and unloaded at his elevator in one week recently 15,000 bushels of grain. J. W. Crow bought 10,000 bushels in the same time.

The Southern Illinois Milling and Elevator Company has been incorporated at Murphysboro with \$30,000 capital stock. Incorporators J. Van Cloosten, Edward Hayes, A. H. Roberts and others.

Suit has been brought by the Soo Railway Company against the Home Insurance Company to recover \$50,000 insurance on its terminal elevator at Gladstone, Mich., which was burned last November.

The Woodston Mercantile and Shipping Association of Woodston, Kan., has recently bought a complete elevator outfit, including shellers and cleaners, of the Barnard & Leas Manufacturing Company of Moline, Ill.

The Miltner Grain and Elevator Company of Wichita, Kan., has recently bought a No. 4 Adjustable Horizontal Oat Clipper and Warehouse Scourer of the Barnard & Leas Manufacturing Company of Moline, Ill.

The Farmers' Elevator Company of Grand Forks, N. D., apparently expects to do business on a grand scale. Besides building a house at West Superior the company will, it is reported, erect one at Liverpool, Eng.

The Heidenreich Company, architects and builders of grain elevators of Chicago, were awarded the contract June 24 for erecting the California State Building at the Columbian Exposition, which is to cost \$75,000.

The W. T. Lamoreaux Company has been incorporated at Grand Rapids, Mich., to buy and sell grain, seeds, beans and wool. Capital stock, \$50,000; incorporators, W. T. Lamoreaux, A. P. Collar and E. A. Stowe.

Notwithstanding Chicago had eighteen inches of rain and but fifteen clear days during May and June the Heidenreich Company, elevator architects and builders, completed Counselman & Co.'s big cleaning house on time.

James Lupe of St. Louis is building a 40,000-bushel elevator at Sedalia, Mo., to be completed in 60 days. It will be 41x39 feet and 58 feet high and will cost \$12,000. This is the first elevator built in that town and will be managed by S. T. Lupe, son of the builder.

The Farmers' Elevator Company of Syracuse, Neb., delegated some of its members recently to call on the State Board of Transportation at Lincoln to compliment the board for the part it took in compelling the railroad to grant a site for the new elevator now building.

Subscription books for preferred and common stock of the National Rice Milling Company were opened at Chicago and New York July 11. The company will buy and unite five of the largest mills in the United States. A net profit of \$260,000 is expected the first year.

The Winona & Dakota Grain Company has been incorporated at Winona, Minn. Of the \$100,000 capital stock, \$50,000 has been paid in, and the indebtedness is limited to \$400,000. Incorporators: J. A. Prentiss, A. G. Moritz and W. H. Garleck, of Winona, Thomas W. Frick of Aurora, S. D., and William Frick of Brook-

ings, S. D. Officers: W. H. Garleck, president; J. A. Prentiss, vice president; and A. G. Moritz, secretary and treasurer.

The new elevator at Galveston, Tex., was completed by James Stewart & Co., the elevator architects and builders of St. Louis, Mo., on June 22, and turned over to the elevator company.

On July 4 the "Union Elevator" at Council Bluffs, Ia., was seized by the county treasurer for taxes. After several attempts to compromise, the railway companies, through H. A. Snyder, paid the taxes in full, amounting to \$6,588.39, and were placed in possession.

The receipts of flaxseed at Milwaukee last year were 620,803 bushels, against 142,663 bushels the year preceding. Of last year's receipts 143,000 bushels were consumed in the manufacture of linseed oil, 101,149 bushels went east by water and the balance to Chicago by rail.

To secure the erection of a large grain elevator at Erie, Pa., the Philadelphia Board of Trade has resolved to take active measures. If the Pennsylvania Railroad and Western Transportation Company can be induced to build the elevator it is expected that the grain trade of Philadelphia will be materially increased.

Owing to the fact that the same fleet can carry one-third more grain from Prescott, Ont., than from Kingston, it is believed that a good transshipping elevator at Prescott would be very successful. Unless the much-talked-of elevator at Kingston materializes Prescott will get the transshipping business of the St. Lawrence River.

Country shippers, says a Montreal exchange, have had innumerable obstacles to contend against in sending their shipments to Montreal, and this no doubt accounts for the fact that Manitoba wheat has recently been shipped from Port Arthur to New York via Buffalo, which route appears to offer better advantages than the St. Lawrence does.

Elmer E. Frye, grain dealer at Rochester, N. Y., is defendant in a suit brought by Ferguson & Lewis, millers, for a shortage in a car of wheat sold by him to them last January. They claim that they bought 2,000 bushels of wheat for which they paid \$2,073.86, and that one of the two carloads was short 200 bushels. Judgment for \$207.38 is asked, with interest and costs.

P. P. Chandler, late of the Superior Grain Company of West Superior, Wis., has organized an elevator company which will build twenty houses this season in Minnesota, and North Dakota along the lines of the Northern Pacific and Great Northern Railways. Several country elevators will be leased and perhaps a terminal house will be built at Superior. Articles of incorporation are in preparation.

Fearing that a blockade would follow the Burlington road posted a notice June 15, on the Kansas City Commercial Exchange that 142 cars of grain were being held upon the tracks without orders for disposition, and that unless the grain was more promptly handled the road would refuse to receive grain billed for Kansas City. Being the second threat of the kind the grain men did not pay much attention to it.

High water caused such a rapid current in the Chicago River the last week of June that vessels could neither go up nor down. Consequently the elevators could ship nothing by water. The unloading of cars was attended with considerable difficulty, as in many of the houses the elevator hoots were full of water. At the close of the flood business was very brisk, however, and a jam resulted at Armour's Elevator.

It is reported all the elevators and grain warehouses in North Dakota along the Great Northern and Northern Pacific Railways belonging to those companies have been leased for a long term of years to the Northwestern Farmers' Protective Elevator Association. The association will build new elevators where needed on the line of both roads. The compiler of this reliable piece of news probably does not know that the railways own no elevators in North Dakota.

Owing to lack of storage facilities, receivers of grain by the Canadian Pacific Railway complain that they are put to many inconveniences and losses through the unwarranted delays they experience in having their grain elevated after arriving here on track; and not only are they subjected to these vexatious disabilities on the part of the C. P. R. authorities, but they are actually charged an extra 1/4c. per bushel in consequence of the company's inability to store the grain.—*Montreal Trade Bulletin*.

Horace W. Cowles of Chicago has filed a bill in the Circuit Court asking for an accounting from William McKee, with whom he entered into partnership in May, 1888, to carry on the business of buying, selling and storing grain. Cowles advanced \$10,000 to the firm and McKee contributed his business at 279 Twenty-second street. After the firm was recently dissolved by mutual consent Cowles claims to have discovered that McKee applied partnership funds to his own use and now holds some of the assets. Judge Horton issued an injunction restraining defendant from disposing of any of the property.

Thompson Bros. of Sioux Falls, S. D., have sold their fourteen grain elevators to Hubbard & Palmer, a new grain firm, having headquarters at Minneapolis, Minn. These houses are on the Omaha Road, between Mitchell and Worthington. The firm has also acquired by purchase eleven elevators owned by Grannis & Palmer, and with the twenty to twenty-five new elevators projected,

they will have an extensive line of country houses. Mr. Hubbard of the new firm is a well known miller at Mankato, Minn., and George Palmer has been his assistant manager.

Watkins Bros., grain dealers at Kokomo, Ind., with elevators at Lincoln, Terre Haute, Tampico and Nevada, made an assignment June 27. M. S. Watkins, the head of the firm, went to Fort Wayne that day and was arrested. He declared he had no intention of running away but was going to look after wool he had bought in the northern part of the state. While his bond was being made out he asked leave to go to dinner. He thereupon left the town. Five farmers have sworn out warrants for his arrest, charging him with embezzlement for selling 30,000 bushels of stored wheat. The liabilities are \$30,000; assets, \$10,000.

A surprising circumstance has occurred here within the past week, not only to farmers, but to the citizens as well. It is nothing else but that the stock feeders of this place, seeing that they could not purchase corn of farmers short of 36 to 40 cents, sent to Chicago for it, and are now receiving it in carload lots, shelled, at a cost laid down here at 32 cents per bushel, and the corn is sound, too. Giesler & Blanchard, Johnson Bros., M. C. Ott and Fred Schiele are among the ones that are receiving it. It costs them 28 cents in Chicago, and they can ship it westward at a rate of 4 cents per bushel, just half what it costs to ship from here to Chicago. The corn is graded as no grade, and from bulletins noticed there must be an immense amount of that grade of corn.—*Review, Wilton, Ia.*

The Kansas Grain & Live Stock Company has been succeeded by the Kansas Grain Company of Kansas City, Mo. The officers of the new company are: T. J. Templer, president; C. W. Templer, vice-president; H. M. Kirkpatrick, secretary and treasurer, and L. B. Young, assistant secretary. Directors: T. J. Templer, C. W. Templer, H. M. Kirkpatrick, W. H. Reed and B. C. Christopher. The company operates 106 elevators, most of them in Kansas on the Santa Fe Railway, and besides has recently leased the new "Sun Elevator" at Kansas City. This elevator is of 300,000 bushels' capacity and has a first-class equipment of machinery, etc. It can clean 12,000 bushels an hour and handle 100 cars in and out every day. Its four side tracks each 2,300 feet long furnish standing room for 265 cars. In facilities for rapid handling the "Sun Elevator" is excelled by few.

The Winona Mill Company of Winona, Minn., has bought of Dyer, Ingham & Co. of Dover, Minn., a two-thirds interest in a line of elevators in South Dakota. T. W. Frick of Aurora retains the remaining third interest. The system consists of twenty storage elevators having a capacity of 500,000 bushels, a 100,000 bushel cleaning elevator at Aurora and a 100-barrel flour mill at Arlington, S. D. Since its large mill was burned a couple of years ago the company has done an elevator business. The houses involved in the above transfer are located at Balaton, Aurora, Bruce, Estelline, Arlington, Hetland, Cavour, Manchester, Esmond, Ree Heights, Highmore, Bremhall, Mansfield, Doland, Verston, Conde, Ferny, Turton, Groton and Blunt. Extensive improvements are being made in the Winona Mill Company's warehouse at Lake Benton. The present manager of this enterprising company is Adolf Moritz, late of La Crosse, Wis.

The Union Elevator Company, of Council Bluffs, Ia., is entangled in several suits that had their origin in the failure of the Brown Bros. Grain Company last fall. A legal contest is now in progress over the possession and ownership of the "Union Elevator." The elevator company was formed by the C. R. I. & P.; C. B. & Q.; C. M. & St. P.; C. & N.W.; Union Pacific, and Wabash railroad companies, and the elevator leased to Brown Bros. When that firm failed it assigned the lease to the H. Brockman Commission Company of St. Louis, a heavy creditor, and the assignment was approved by the president of the elevator company. But Brockman failed to use the elevator, has not kept it insured and did not pay the rent lately. On June 23 one Peck and Peavey accompanied by six or more other men, agents of Frank H. Peavey and the Union Pacific, Northwestern and Wabash railroads, made forcible entry by breaking in the doors and took possession of the same. To regain possession the Chicago, Rock Island & Pacific, the Chicago, Burlington & Quincy, and Chicago, Milwaukee & St. Paul railroads petitioned Judge Deemer that Frank H. Peavey et al. be restrained from preventing H. A. Snyder, secretary of the Union Elevator Company, from taking exclusive possession, and that it be decreed that the assignment of the lease to Brockman be declared illegal, fraudulent and void. A temporary injunction was granted on the evening of June 28. When the elevator company was formed an agreement was made that when the shipper did not designate the road over which shipment was to be made there was to be an equal division. Plaintiffs complain that this agreement has been violated by discrimination and rebates.

The imports of hay in May were 6,233 tons, against 3,542 tons the preceding May; and during the eleven months ending with May 70,630 tons, valued at \$616,194; compared with 50,577 tons, valued at \$394,162 during the corresponding period of 1890-91. Of imported hay we exported in the eleven months 151 tons, valued at \$1,887; against 9 tons, valued at \$73 in the eleven months ending with May, 1891.



## Latest Decisions.

### Acceptance of Draft.

Inasmuch as the universal custom is to accept drafts by writing the name across the face, that amounts to a legal acceptance, whether accompanied by words of acceptance or not.—*Fowler vs. Gate City Bank, Supreme Court of Georgia, 13 S. E. Rep. 831.*

### Authority of Agent.

Where the recognized agent of an insurance company issues a policy of insurance, receives a premium and forwards it to the company, and after waiting the usual time for a reply, and receiving none, delivers the policy to the insured, in an action on the policy, the company cannot deny its own power to issue the policy or the authority of the agent.—*Hoge vs. Dwelling-House Ins. Co., Supreme Court of Pennsylvania, 20 At. Rep. 939.*

### Responsibility of Employer for Safety of Employees.

It is the duty of an employer in all cases to furnish his employees with a reasonably safe place at which to work, and with reasonably safe instruments or tools with which to work; and, if he delegates these duties to another, such other becomes a vice-principal, for whose acts the principal is responsible.—*Kelly vs. Ryus, Supreme Court of Kansas, 29 Pac. Rep. 144.*

### Common Carrier—Loss—Evidence.

The Supreme Court of Texas held, in the recent case of Missouri Pacific Railway Company vs. Gernon, that in an action by a consignee against a common carrier for cotton lost in transit, a statement in writing to the consignor and a letter relating to the cotton destroyed, both written after its destruction by a general agent of defendant, who was invested with authority to adjust claims against it, and made within the scope of his agency, are competent evidence against the principal.

### Damages for Refusal to Accept Goods Bought.

A firm bought a carload of goods to be shipped and paid for on delivery. The seller shipped the car and forwarded a draft. The draft was presented before the car arrived, and payment was refused, and the buying firm notified the seller that he had violated the contract in demanding payment before the delivery of the goods, and that they would not take the goods when they arrived. When the car arrived it was tendered to them and they refused it. It was then sold for what it would bring, which was less than the contract price. The buyers were liable for the deficit.—*McCord vs. Laidley, Supreme Court of Georgia, 13 S. E. Rep. 509.*

### Possession of Note by Maker.

Where a note was surrendered to the maker without full payment and without authority by bankers who held it for collection, and in an action thereon the maker relies upon a subsequent agreement to show payment thereof, it is not error to refuse to instruct the jury that the note, being in defendant's possession, was presumed to have been paid; that defendant acquired possession of the same lawfully, and that burden of proof was on the plaintiff to disprove these facts by a preponderance of the evidence.—*Emerson vs. Mills, Supreme Court of Texas, 18 S. W. Rep. 805.*

### Cash Policies in Mutual Companies.

Where a receiver is appointed for a mutual fire insurance company, and all the policies are canceled by order of the court, the holders of the "all cash premiums" policies have valid claim against the company's unearned return premiums. The premium notes can only be used for indemnity against losses by fire, and the holders of the "cash" policies have a right to insist that the fund created by the premium notes be first exhausted in payment of fire losses, and that the cash fund on hand be not drawn on for that purpose, so as to make it insufficient to pay the claims of the holders of the "cash" policies, unless the premium notes prove inadequate to pay the fire losses.—*Clark vs. Manufacturers' Mutual Fire Ins. Co., Supreme Court of Indiana, 30 N. E. Rep. 212.*

### Lien on Freight for Undercharge by Mistake.

A shipper at defendant's freight office asked the freight cashier the rate of freight to a certain point, who, not knowing the rate, repeated the question to the way-bill clerk, who, on account of noise, misunderstood the cashier, and gave an erroneous rate. His only means of knowing the rate was by reference to the tariff sheet which hung in the office for the convenient use and information of all shippers, the rates in which could not be changed by any employee. The cashier's duties did not require him to know the rate. On the erroneous answer of the way-bill clerk, the cashier figured up the amount of plaintiff's shipment, who after delivered his goods, paid the amount to defendant and requested shipment. Shortly thereafter the error was discovered, but plaintiff could not be found, and the goods were forwarded with instructions to the agent to hold them for the additional charges

based on the correct rate, which were fair and reasonable, and would have been paid by plaintiff if he had been correctly informed before shipment. Plaintiff refused to pay additional charges, demanded the goods and sued for conversion. There was no contract of shipment, owing to the mistake, and the company was entitled to hold the goods until it received its reasonable charges for transportation.—*Rowland vs. New York, N. & H. Ry. Co., Supreme Court of Errors of Connecticut, 23 At. Rep. 755.*

### INSPECTING AND GRADING WHEAT.

A great many complaints have been heard of late regarding the inspection and grading of Manitoba wheat. In past years there has been more or less complaint coming from Eastern Canada millers and dealers regarding the grading of Western grain. A good deal of this has undoubtedly been due to a chronic disposition on the part of our Eastern friends to grumble. Manitoba grain shippers have, as a rule, found their dealings with Eastern Canada millers and others of a very unsatisfactory nature. There was almost invariably some complaint as to the quality not being up to sample, and usually a demand for shortage. To such an extent has this been the case that some of our shippers avoid doing business in Eastern Canada, and turn their attention entirely to exporting. Grumbling from the East is therefore looked for as a matter of course, and has on this account not received as much attention perhaps as should have been given to it.

This year there has been much more complaint than usual from the East, and there have also been complaints from New York and other export points as to the grading of Manitoba wheat, some of which have been of a serious nature. On account of the habitual grumbling of Eastern people, as noted, the matter did not attract much attention for a time, but it finally became the general belief that where there was so much smoke there must be some fire.

The crop of last year, in the first place, has been an exceedingly difficult one to grade. It is of a very mixed and widely varying qualities, and altogether has been the most difficult one to grade for many years. It would be impossible to handle such a crop without considerable dissatisfaction as to grading. At the same time it was recognized by the local grain men that there might be something wrong about our system of handling and inspecting wheat, and the local trade are of course intensely interested in the matter. It is the desire of the grain men of Manitoba to have the grading of our wheat above the possibility of undue manipulation or reproach. The interest of our grain growers and grain dealers demands this. Our grain exporters, who ship upon certificates of inspection, have a right to demand that every possible security be placed about our system of inspection, so that there can be no possibility of tampering with the grades.

Complaints from the East and from abroad as to the grading of Manitoba wheat have been principally affecting Port Arthur inspection. Now, it must be understood that the grain trade of Manitoba has no control whatever over the inspection at Port Arthur. Though nothing but Manitoba grades of wheat are inspected at Port Arthur and Fort William, yet it is the case that the inspectors there and the system of inspection followed there, is entirely independent of any authority from the trade or official trade bodies of Manitoba. Inspection there is carried out under the rules provided by the Dominion Government, independent of the Manitoba boards of trade. On this account the Winnipeg board has no official right to interfere with the inspection at Port Arthur. Still, as the reputation of Manitoba wheat was at stake, it was felt that something should be done to protect our interests here from the constant complaints of wheat shippers being under the grade which it was certified by inspection to be. Consequently a committee of Winnipeg grain men visited Fort William and Port Arthur, in an unofficial capacity of course, with a view of looking into the system of inspection there. The Winnipeg grain men, through their local organization, have also discussed the matter fully, and will make such representation to the Dominion Government as in their opinion is necessary to place our system of inspection upon a sound and satisfactory basis. The co-operation of Eastern Canada boards of trade will be asked for in assisting the Winnipeg people in obtaining the reforms needed. The aim will be to place the terminal elevators at Fort William, under a system which will provide security that wheat sent out is fully equal in point of quality to the official certificate of grade accompanying it.

From what can be learned of the system under which inspection is carried out at Fort William, there seems to be need of some reform. In the opinion of some grain men, and the opinion seems to be borne out by facts, it has at times been practically impossible to give a true certificate of grade on shipments from the elevators at the upper lake ports, through which Manitoba grain must pass on its way eastward. This alone shows the necessity of action in the matter. An official certificate of grade certainly should not be given for grain shipped from an elevator, which may or may not be up to the grade certified to. Every facility should be given the inspector of inquiry into the quality of the shipment as made from the elevators, and unless the assurance as to grade is as certain as it is possible to make it, no certificate should be issued. This, it is declared, has not always been the case in connection with shipments from Fort William.—*Winnipeg Commercial.*

## CROP : CONDITIONS.

**OHIO WHEAT.**—Secretary Bonham of the State Board of Agriculture continues to receive reports of injury to wheat. Early wheat contains little grain and that of inferior quality. He believes that the damage is caused by scab.

**MANITOBA.**—The actual decrease in the crop area this year, as compared with 1891, is only a little over one-half per cent., so that the decrease is very trifling, amounting to only 8,931 acres in a total area of 1,341,270 acres.

**OREGON, WESTON, UMATILLA Co., June 22.**—The wheat prospect here is very fine. Some farmers are talking of sixty bushels per acre on good summer fallow lands. South of us some damage has been done by hot winds. Oats, barley and timothy promise fine crops. Fruit will be abundant. J. D. ISRAEL.

**RYE.**—The first return of acreage shows a breadth very slightly smaller than last year. In Pennsylvania and Illinois, states having a large acreage, there is a slight falling off in the breadth, but the loss there is practically made good by an increase in some other districts, notably in the states west of the Missouri River. The total area as compared with last year is returned at 99.2.

**KANSAS.**—Secretary Mohler of the Kansas Agricultural Board says: "Wheat crop of state almost without equal. Total winter and spring product placed at 62,000,000 bushels of good quality. Condition of corn for the state is raised from 69 a month ago to 81 July 1. Oats and barley reduced in condition considerably because of lack of sufficient rainfall during June."

**BARLEY.**—The breadth of barley shows an increase of 2.3 per cent. over that harvested last year. The increase is general in almost all districts where grown, in spite of the fact that the crop last year was the largest ever harvested. The increase is most marked in those states where the bulk of the crop is raised, except in New York where there appears to be a slight decrease. Among the prominent states, North Dakota leads with 16 per cent. increase over the breadth of last year; California shows 4; Minnesota, 4; South Dakota, 5, and Nebraska, 2.

**SOUTH DAKOTA, EUREKA, McPHERSON Co., June.**—One hundred farmers near Eureka have sown 12,415 acres to wheat, 1,324 acres to flax, 710 to rye and 527 to corn. This is an increase of 9 per cent. in acreage of wheat over 1891, and a decrease of about 55 per cent. in flax. All crops are looking fine, but are about three weeks later than last season. Flat lands have suffered a great deal from too much water and low places have been entirely drowned out. About one half of this year's crop was sown to stubble and 30 per cent. of the stubble grain is being overpowered by weeds, and will make a very light crop, while land clear of foul weeds promises an abundant yield. CHAS. PFEFFER.

**CLOVER.**—The Washington report says: The total breadth of clover varies little from that of last year, though there has been considerable change in the comparative area of the different states. The winter and spring were distinctly unfavorable to old sod in the Ohio valley and portions of the Upper Mississippi valley, winter killing and an unfavorable spring which interfered with recovery, causing the breaking up of a considerable area. Wisconsin suffered to a marked extent, the trying conditions of a severe spring following a protracted drouth which seriously lessened the vitality of the plant. The loss in the districts referred to was offset by a considerable increase in the southern and mountain states, and the states of the Missouri valley and the Pacific coast.

**GOVERNMENT CROP REPORT.**—The July returns to the statistician of the Department of Agriculture make the following averages of condition: Corn, 81.1; winter wheat, 89.6; spring wheat, 90.9; oats, 87.2; rye, 92.8; barley, 92; potatoes, 90. The acreage of corn is reported as 95.6 of the actual area of last year; of potatoes, this year's area shows 94.2. The average condition of corn in July, 1891, was 92.8. The condition in principal states for July, 1892, is as follows: Ohio, 80; Indiana, 72; Illinois, 70; Iowa, 75; Missouri, 75; Kansas, 81; Nebraska, 84; Georgia, 95; Texas, 95; Tennessee, 92; Kentucky, 93. The acreage averages in the same states are: Ohio, 90; Indiana, 84; Illinois, 84; Iowa, 87; Missouri, 86; Kansas, 99; Nebraska, 97; Georgia, 110; Texas, 107; Tennessee, 102; Kentucky, 96. Condition of winter wheat on June 1 was 88.3. In July of last year, 96.2. State averages now are: Pennsylvania, 92; Kentucky, 97; Ohio, 83; Michigan, 88; Indiana, 85; Illinois, 90; Wisconsin, 80; Missouri, 84; Kansas, 91; California, 95; Oregon, 91. Condition of spring wheat June 1 was 92.2. In July last year, 94.1. State averages now are: Minnesota, 92; Iowa, 88; Nebraska, 82; South Dakota, 95; North Dakota, 90; Washington, 93; Oregon, 91. Condition of all wheat July 1, 1892, 90. On June 1, 89.7. In July, 1891, 95.5. Condition of oats, June 1, 88.5. In July, 1891, 87.6.

Late threshed grain from stacks turned out badly on account of the heavy spring rains. The quality of the early threshed grain was much better and led many elevator men to buy later but market prices were forced down by heavy receipts, so that the profit in handling is small, and in many cases loss has resulted.



## WATERWAYS

Work has been begun on two more whaleback vessels at West Superior, Wis.

On a cargo of corn unloaded at Buffalo recently the steamer C. S. Parnell was short seventy-two bushels.

The wheat cargo of the steamer Rosedale overran 147 bushels when recently unloaded at Fort William, Ont.

After taking a load of Minnesota hard spring wheat from Duluth to Detroit the steamer S. F. Hodge at once reloaded with Michigan wheat and left for Buffalo.

Unfavorable weather has impeded field work on the Hennepin Canal. Proposals for constructing three miles of the canal were opened June 25 by Capt. W. L. Marshall at Chicago.

Grain dealers and millers of Minneapolis have invested in the Soo line boats that ply between Gladstone and Buffalo, and will probably look to this connection for aid in competition with Duluth.

While on the way to Kingston with corn from Chicago the Canadian steamer Alma Muuro stranded on Pelee Island in Lake Ontario and 7,000 bushels of the cargo was jettisoned to release the ship.

In compliance with the demand of the United States Government the city of Chicago recently removed the bridge at Canal street and vessels can now pass freely up and down the river at that point.

The Senate Committee on Commerce has recommended the project of building a canal between New York and Philadelphia, in its report on the bill to authorize preliminary survey. It would cost \$12,000,000.

Large quantities of corn were shipped from Kansas City for Mexico during June, but lately steamers are carrying the grain from New York for almost nothing, and Kansas City's trade in that cereal is declining.

Vessel agents have been offered 2¼ cents a bushel to carry two and three million bushels of wheat from Chicago to Buffalo, and one vessel owner at Cleveland has been offered the same terms on a million bushels.

The steamer Sir L. Tilley, grain laden and bound from Duluth to Kingston ran ashore in Lake Ontario and 2,000 bushels of grain had to be lightered before the steamer could proceed with its tows, the barges Merritt and Benson, also grain laden.

During the first half of the year 3,013 arrivals of vessels were recorded at Chicago, against 3,049 in the same period last year. The number of arrivals was greater each month than in the corresponding months last year except in June, when two floods stopped traffic.

President Harris's message urging Congress to retaliate on Canadian vessels on account of the discriminating canal tolls is pleasing to the officers of the Central Vermont Steamship Line. The company has a claim against the Canadian Government for \$30,000 in rebates, for which no satisfaction can be obtained.

The Nicaragua Canal Construction Company met at Denver, Colo., June 16, and elected the following directors: Warner Miller, Samuel Thomas, Sturtevant Fish, Seward Webb, Smith M. Weed, A. C. Griseome, George W. Davis, H. O. Armour, S. B. Slocum, J. W. Miller, Henry R. Hoyt, J. L. Rahltoar, John W. Mackay.

The Canadian steamer Clinton, as related in our last issue, ran ashore in the Sault Canal and wet her cargo of wheat which was unloaded at Chicago. A load of rye was placed aboard and the ship started for Kingston, but again went ashore in a fog, when within a few miles of that port. While stranded the water leaked in and damaged the whole cargo amounting to 7,000 bushels.

A proposition submitted by Mr. Herbert, representing the Dominion Government at Washington, shows that Canada is weakening on the toll rebate question. The proposed agreement is that the tolls be rebated without regard to ports of transshipment or export, if British subjects be granted like privileges on the Sault Ste. Marie Canal, and if article 30 of the treaty of Washington be restored.

Rates are against the grain trade of Montreal. A shipment from Chicago to Liverpool via Montreal is charged 6½ cents to that city, and 1s. 9d. per quarter to Liverpool. On the other hand grain goes to New York at 5 cents and thence to Liverpool at 9d. Thus it costs 1½ cents less to ship from the West via New York than via Montreal, with another saving on the ocean carriage of 1s. per quarter.

Erroneous impressions are afloat regarding the harbor facilities at Chicago. A prominent flour manufacturer of Minneapolis recently declared that there was not more than fourteen feet of water in the Chicago River over the tunnels, when really there are nineteen feet, which depth will be sufficient until the Government deepens the channels connecting the Great Lakes. Dredges are at work in the river, even now. The Chicago River has a capacity ample to meet the needs of commerce, but land along its banks is too valuable and is used for other than

dock purposes. At the mouth of the river and in Lake Michigan the Government has constructed a harbor larger than any other on the lakes. Chicago also has the Calumet River where cheap dock facilities and deep water can be found, and an immense grain elevator has just been completed on its banks.

Besides the Sault Ste. Marie Canal and Hay Lake Channel immediately below it there are six points in the waters connecting the Great Lakes that need improvement, and for which Congress has appropriated funds. Work needs to be done at Round Island and Sailor's En campment Island in the St. Mary's River, the outlet of Lake Superior; and further south at the foot of Lake Huron is Corsica Shoal, and before the head of Lake Erie is reached vessels encounter the shallow St. Clair Flats Canal, Grosse Point Flats and the Limekiln Crossing.

## LATE PATENTS

Issued on June 14, 1892.

BALING PRESS.—Henry Dietz, Denver, Colo. (No model.) No. 476,954. Serial No. 396,770. Filed June 18, 1891.

GRAIN DOOR FOR RAILWAY CARS.—John C. Wands, St. Louis, Mo. (No model.) No. 477,092. Serial No. 407,050. Filed Sept. 28, 1891.

Issued on June 21, 1892.

GRAIN METER.—McClellan Cowan and James G. Ragains, Wichita, Kan. (No model.) No. 477,245. Serial No. 392,859. Filed May 15, 1891.

GAS ENGINE.—James A. Charter, Sterling, Ill. (No model.) No. 477,295. Serial No. 405,264. Filed Sept. 10, 1891.

AUTOMATIC GRAIN WEIGHER.—Wesley Butler, Litchfield, Ill. (No model.) No. 477,508. Serial No. 412,903. Filed Nov. 24, 1891.

GRAIN CLEANER.—Thomas J. Hatfield, Dublin, Ind., assignor of one half to J. C. Benson, Alcony, O. (No model.) No. 477,594. Serial No. 410,493. Filed Oct. 31, 1891.

Issued on June 28, 1892.

GRAIN SEPARATOR.—George A. Schrand, Seneca, Ill. (No model.) No. 477,783. Serial No. 419,542. Filed Jan. 28, 1892.

GRAIN PURIFIER.—Fred P. Manning, Turner, Ill. (No model.) No. 477,667. Serial No. 420,402. Filed Feb. 5, 1892.

## EXPORTS OF WHEAT.

In May we exported 5,629,412 bushels of wheat to the United Kingdom, 1,106,260 to France, 765,457 to Germany, 2,019,052 to other countries in Europe, and 1,238,559 bushels to Canada, against 2,561,062 bushels to the United Kingdom, 1,742,247 to France, 122,648 to Germany, 1,539,162 to other countries in Europe, and 571,541 bushels to Canada in May last year.

In the eleven months ending with May we exported 62,237,996 bushels of wheat to the United Kingdom, 42,038,954 to France, 6,311,695 to Germany, 32,110,083 to other countries in Europe, 4,940,435 to Canada, 44,704 to the Central American states and British Honduras, 10,100 to the West Indies and Bermuda, 164,622 to Brazil, 65,042 to other countries in South America, 28,899 to Asia and Oceania, and 19,728 to other countries, a total of 147,972,258 bushels of wheat, valued at \$152,876,626; in comparison with 26,830,869 bushels to the United Kingdom, 11,403,938 to France, 139,588 to Germany, 6,795,506 to other countries in Europe, 2,145,388 to Canada, 55,728 to the Central American states and British Honduras, 162,619 to the West Indies and Bermuda, 580,112 to Brazil, 128,287 to other countries in South America, 14,142 to Asia and Oceania, and 8,905 to other countries, a total of 48,257,082 bushels of wheat, valued at \$44,127,116 exported in the corresponding eleven months of 1890-91.

No grade corn is being sold on the Chicago Board of Trade for shipment to Iowa where it is being fed upon arrival.

German seed exhibitors at the World's Columbian Exposition will not be antagonized by American seedmen, as has been represented in Germany. The American Seed Trade Association, assembled in convention at New York, has expressed a hearty desire to have the fullest representation of the products of the world, as related to the seed trade, exhibited at the exposition.

The fire tables compiled by the *Chronicle* show that last year 80 grain elevators, 39 grain warehouses, 26 hay warehouses, 6 hay pressing works, 1 flax mill and 5 rice mills were burned in the United States. During the 17 years ending with last year 915 grain elevators, 476 grain warehouses, 166 hay warehouses, 120 hay pressing works, 45 flax mills and 28 rice mills were burned.

## THE EXCHANGES

On Saturdays during July and August the session of the Chicago Board of Trade will close at noon.

The Milwaukee Chamber of Commerce on Saturdays during July and August will close its sessions at 12:30.

On Saturdays during July and August the Toledo Produce Exchange will adjourn its session at 12:30 o'clock.

Tickets of membership in the New York Produce Exchange are selling at \$750, with few buyers. Tickets are reuted at \$25 a year.

We are indebted to William J. Langson, secretary of the Milwaukee Chamber of Commerce, for a copy of his annual report for 1891.

The Board of Trade of Kansas City, Kan., has declared in favor of such a revision of treaties with Mexico as will admit our food products to that republic.

Members of the New York Produce Exchange began their Fourth of July celebration on July 1 with the booming of cannon crackers on the floor. The incessant noise prevented any business after noon.

A favorable report was submitted by the real estate committee of the St. Louis Merchants' Exchange on the proposition to purchase the Chamber of Commerce building at a cost of \$600,000. The exchange is now simply a tenant.

At a recent meeting of the Richmond Grain and Cotton Exchange the following grain committee was appointed: C. H. Simpson, chairman; F. H. Dean, Norvell Ryland, S. T. Beveridge, S. R. Gates, W. R. Johnston and George T. King.

In view of the possible passage of the anti-option bill, F. G. Logan & Co., and Schwartz, Dupree & McCormick of the Chicago Board of Trade, have requested their correspondents not to send orders for any month beyond September, except in closing open trades.

New No. 2 Red or New No. 2 Spring Wheat can be delivered upon contracts for delivery of regular wheat in the Chicago market at all times. Certain Eastern grain dealers have labored to create a false impression in the West in regard to what constitutes the Chicago contract grade.

The Denver Grain Merchants' Exchange was recently organized at Denver, Colo., for mutual benefit and protection. It seeks to promote official weighing and inspection of grain handled, the appointment of a grain inspector by the governor and the establishment of an open board. L. Butterfield is president, M. C. Jackson vice-president, and A. W. Ballard, secretary and treasurer.

The Kansas City Commercial Exchange is taking steps to establish trading in futures. The committee appointed to formulate a plan has reported and the directors have approved their plan. A favorable vote of the members was taken July 8, and the system will go into operation as soon as possible. It is proposed to make public all the houses on the Kansas side of the state boundary and trade in receipts issued by those houses.

The new directors of the Pittsburg Grain Exchange met recently and chose the following officers: George W. Johnston, president; E. B. Mahood, vice-president, John A. McCracken, secretary; S. R. Patterson, treasurer, and Oscar Alexander, superintendent. The membership of the exchange has been decreased slightly during the year; one member having died, and eight others having left the exchange. Six new members were enrolled.

The Indianapolis Board of Trade held its annual election recently and chose the following governing committee: E. E. Perry, W. H. Cooper, George E. Townley, Albert Baker, D. P. Erwin, L. J. Blaker, Frank E. Jones, John M. Shaw, Robert Scott, R. O. Hawkins, J. S. Lazarus, and E. Muehner. The officers are: John W. Murphy, president; J. A. Wildman, vice-president; John Osterman, treasurer, and Jacob W. Smith, secretary. In accord with the recommendation of the grain committee Edward Dunn was elected chief grain inspector and John Heiner, assistant.

Affairs on the Chicago Board of Trade are not in a very satisfactory condition when the dominant power is a man with whom many of the best brokers are afraid to have transactions lest he should fail to meet his obligations. As one of them put it, "We were all broke a few days ago and didn't know it," that is, the operator in question had gone far beyond his depth and if he had been forced to settlement he could not have paid up. He is said to have been short 20,000,000 bushels of wheat. The bulk of this is now thought to be covered but there is no telling when the same hazard may be taken again. —*The Economist*.

Michael Collins, Peotone, Ill.: "While I was in the grain trade the AMERICAN ELEVATOR AND GRAIN TRADE was always a welcome visitor."



# ITEMS FROM ABROAD

Crops are looking well in France, with fine weather.

The Russian decree permitting the export of all grains except rye has been issued.

H. M. Phillips, a London grain dealer, failed June 24. His liabilities are £18,362, and assets £14,797.

The Langes granaries at Hamburg, Germany, were damaged by fire July 9 to the extent of \$350,000.

Portugal in February exported 1,400 quarters of rye and 700 sacks flour, and imported no rye and 500 sacks flour.

The United Kingdom has imported from August 1 to June 28, 4,478,000 quarters of barley, against 4,491,000 and 3,758,000 in the corresponding periods of 1890-91 and 1889-90, respectively.

The Liverpool Corn Trade Association has this season adopted three standards for American wheat, those now established at Chicago for No. 2 Red Winter, No. 2 Spring (Northern), and No. 2 Spring.

Algeria in April exported 31,000 quarters of wheat, 17,000 of barley, 1,900 of oats and 3,000 sacks of flour, and imported 2,000 quarters of wheat, 4,000 of barley, no oats and 5,000 240 pound sacks of flour.

Russia's exports of grain from January 1 to May 16 were, of corn, 126,000 quarters; oats, 164,000 quarters, and flour, 10,600 sacks; against 876,000 quarters corn, 2,405,000 quarters oats and 106,000 sacks flour in the same period last year.

Smyrna, in Asia Minor, exported last year 9,566 bags of wheat, 414 bags of rye, 654,000 quarters of barley, 279 bags of flaxseed, 3,800 tons of cottonseed, 18,638 bags of canary seed, 2,921 bags of millet, 77,300 quarters of beans and 58,817 bags of dari.

Russia had in stock June 13 at the chief centers 1,240,000 quarters of wheat, 132,000 of rye, 887,000 of oats, 396,000 of barley and 32,000 quarters of corn, which is a decrease from the stocks a month before except in wheat, which increased 39,000 quarters.

Belgium in the first five months of the year imported 1,927,000 quarters of wheat, 173,000 of rye, 25,000 of barley and 44,000 sacks of flour; and exported 750,000 quarters of wheat, 173,000 of rye, 90,000 of barley, and 333,000 sacks of flour, each weighing 240 pounds.

Last May the Russian Government prepared a system of grain grades, but at a meeting in Berlin June 4 of grain dealers and millers the classification was rejected as impracticable. Average samples of each kind of grain will be provided at the beginning of each cereal year.

Roumania exported during the two first months of the year 74,000 quarters wheat, 128,000 quarters corn, 40,000 quarters barley, 4,000 quarters oats and 10,000 quarters rye. The imports in the same time were 1,000 quarters wheat, 200 quarters corn, 60 quarters barley and 700 quarters oats.

The Liverpool Corn Trade Association at a recent meeting voted that the time for trading in American options be limited to the hours between 10:30 A. M. and 4:30 P. M. As the American market does not open until 4 o'clock Liverpool time there will be little opportunity to fill American orders.

A commission has been appointed to collect crop statistics in Russia, as to the acreage, total crop and yield per acre, the quantity available for export and the quantity received and shipped from each primary market and river port. The information is to be summarized not later than the end of November.

In no district of India is the wheat crop equal to the previous crop. While the harvest yielded 32,810,000 quarters last year the last crop is estimated at 25,600,000. A large amount of the new crop available for export has already been shipped, and it is expected that receipts of Indian wheat in Europe will show a marked decrease, notwithstanding the low price of silver.

Holland imported during May 156,000 quarters of wheat, 93,000 of corn, 7,000 of oats, 25,000 of rye, 42,000 of barley, 50,000 sacks wheat flour and 6,000 sacks of rye flour, and exported during that month 122,000 quarters of wheat, 13,000 of corn, 49,000 of oats, 57,000 of rye, 19,000 of barley, 11,000 sacks wheat flour and 3,000 240-pound sacks rye flour.

France imported from August 1 to June 196,400,000 bushels of wheat and 675,000 240-pound sacks of flour, and exported in the same time 48,000 bushels of wheat and 63,000 sacks of flour. The imports of wheat and flour as wheat were 100,000,000 bushels, against 36,000,000 bushels and 25,280,000 bushels in the corresponding period of 1890-91 and 1889-90 respectively.

Had it not been for the mistaken policy of Russian ministers the unfortunate Moujik would have been able at the outset to feed himself, or be fed by his friends, on better terms than has actually been the case, for in the first place Western Europe ran up the prices for wheat, rye, oats and barley shillings above a normal level, and

in the second place secured more of the Russian product than was necessary, causing an accumulation of reserves in these markets where they were not wanted, and a converse depletion at Russian centers where the stuff was certainly more requisite.

Italy imported during April, 202,000 quarters of wheat, 23,500 of corn, 3,600 of oats, 3,600 of barley and 900 sacks of flour, against 163,000 quarters of wheat, 4,300 of corn, 10,800 of oats, 2,600 of barley, and 300 sacks of flour in April, 1891. The exports in April were 300 quarters of wheat, 2,150 of corn, 100 sacks flour, against 90 quarters of wheat, 4,900 of corn and 250 sacks flour.

Trebzonde, Turkey, imported last year 16,250 quarters of corn, 4,500 of barley and 16,300 of wheat and flour combined, against 22,400 quarters of corn, 3,900 of barley and 20,700 of wheat and flour combined in 1890. The exports of last year were 7,000 quarters of corn, 7,600 of flaxseed and 1,400 of wheat and flour combined, against 13,300 of corn, 8,000 of flaxseed and 500 of wheat and flour combined the year before.

Shipments of wheat from the Argentine Republic from January 1 to June 11 have been, to the United Kingdom 1,050,000 quarters, to the Continent 250,000 quarters, which is a large increase over the shipments during the corresponding period last year. Corn shipments since January 1 have been, to the United Kingdom 111,800 quarters, and to the Continent 53,500 quarters. The corn crop is the best in years and the cold and dry weather after harvest has placed the grain in excellent condition.

Sweden imported during the first five months of the year, 135,000 quarters of wheat, 65,000 of rye, 4,500 of barley, no oats, 48,000 sacks of flour and 19,000 240-pound sacks of rye meal, against 103,000 quarters of wheat, 100,000 of rye, 500 of barley, no oats, 35,000 sacks of flour and 26,000 sacks of rye meal, during the corresponding five months of 1891. The exports in the five months were 141,000 quarters of oats, 100 of rye, 6,300 sacks of flour and 200 sacks of rye meal, against 934,000 quarters of oats, 25,000 of rye, 6,000 sacks of flour and 600 sacks of rye meal in the five first months of 1891.



Frank W. Commons, grain dealer at Minneapolis, Minn., was married to Miss Delia Andrews recently.

Captain B. A. Jacob was recently re-elected secretary and treasurer of the Richmond Grain and Cotton Exchange.

Eugene O. Edward, employed by Osborne & McMillan, grain dealers at Minneapolis, Minn., was married at La Crosse, Wis., on the evening of June 28.

Harry Van Dusen, son of G. W. Van Dusen, the grain and elevator man of Minneapolis, was recently married to Miss Josephine Anderson at Rochester, Minn.

John Switzer, chief grain inspector of the New Orleans Board of Trade, and John T. Broadnax, a leading grain dealer of that city, are visiting the chief cities of the North and West and examining the methods of handling grain.

Mr. McLeod, of Harris & McLeod, grain dealers of Williamsburgh, Ia., has sold his interest in the business to his partner, and is now on his way to California for the benefit of his health which has been poor for several years.

H. M. Kirkpatrick, well known in the grain trade, has been elected secretary and treasurer of the Kansas Grain Company, and will manage the business at Kansas City, Mo. Mr. Kirkpatrick was out of the grain trade for several years before taking this position.

## OBITUARY

J. W. Luce, grain dealer at Minneapolis, Minn., is dead.

David H. Boggs of Boggs Bros, dealers in grain, flour and feed at Toronto, Ont., is dead.

John Dollard, grain dealer and an old member of the New York Produce Exchange, died July 5. Fifty years ago his father moved from Ireland and started in the grain business at New York, which business the son entered in 1860.

The Illinois state fair will be held at Peoria and the State Board of Agriculture has offered a number of cash prizes aggregating \$6,500, with a view to inducing the farmers to make an especially fine exhibit. A portion of the exhibit will be shown at the World's Columbian Exposition with the Illinois exhibit.

## NO GRADE SPRING WHEAT AT MINNEAPOLIS.

The elevator companies doing business in the Minneapolis Chamber of Commerce are in no very amiable frame of mind just at present over the returns from the spring threshed wheat crop of North Dakota, and particularly their own financial returns from the transactions in it. "Every elevator company has lost money on this class of wheat this summer," said Mr. Cardin of the Northern Pacific Elevator Company yesterday, "and some of them got bitten pretty badly. Our company was in it with the rest of them, and for several weeks we bought heavily. We now wish we hadn't."

The spring threshed wheat crop, it seems, has been a great disappointment all around. It is a disappointment to the farmers, for they have clung tenaciously to the fond hope all these months of snow and sleet and rain of finding their stacked grain in good condition this spring, and of being able to realize good wheat and good prices. The press of the state and the boomers of all sorts have stoutly maintained all along that this wheat would turn out No. 1 Northern ———, and these statements have been reiterated so often that finally these elevator men came to believe that perhaps they were so, though their own good judgment told them to the contrary. The farmers came to believe it, still more easily, and the result has been that there has been very bitter disappointment all along the line. The elevator men were for the once badly fooled. They were led to believe that this wheat would be good wheat, and they jumped in and bought all that came along, only to have the price so hammered down on them that they did not have time to stand from under.

A month or more ago this wheat commenced to pour into the country elevators in great quantities. It came direct from the machines and was shipped promptly to Minneapolis. The price started at 50 and 60 cents. In a week it was going down like lead, and in another week reached hard pan, which in this instance was the point where there was no profit in it at all for the farmer. From 25 to 40 cents the price now ranged, which is the price in Minneapolis. Considering that it costs 12 cents to get it here and 12 or 15 cents to thresh it, the margin of profit became finally so small that there was nothing to do but stop shipping it. From 225 to 250 cars a day of this wheat the receipts have dropped down to from twenty-five to forty cars. The elevator companies have had really to refuse to take the stuff. They did this by putting the price so low that the farmers couldn't afford to thresh it. At the present rate of receipts all is going well. The companies can manage to dispose of this amount, but when it was coming in at the rate of 250 cars a day they were actually at their wit's end to know what to do with it, and this wheat is practically all damp wheat. The cars are rare that get any grade at all. Often the wheat would heat so in transit as to be practically worthless on being unloaded at the elevators. It was a picnic, indeed, for a time with the companies, but happily the rush is now over and they can begin to see their way clear to disposing of the stuff. This has all along been a difficult job. It has been done though, but by various means and only by a considerable display of ingenuity. The smaller buyers have bought a good deal of it, usually on their own terms. The no grade wheat they have put through a renovating process in the elevators, mixed it with No. 1 Northern and made No. 2 of it, or No. 2 and made No. 3, and in various other ways tried to get a grade on it. Some has been sold by sample. In many cases it has been mixed first with screenings in order to dry it, and then separated and mixed with the higher grades of wheat. Thus doctored up it has been shipped East and South, wherever a market could be found for it. Milwaukee has taken the largest share. Some has been sent to Chicago and there worked off by shrewd traders. Southern points have been obliging enough to take a few cars at a time at occasional intervals. Other cars were sent to Duluth, and promptly sent back. The ways were indeed various and perhaps oftentimes devious, but the elevator men finally succeeded in getting most of their damaged stock off their hands and are now breathing easy again. Though the Northern Pacific has refused to buy any more of this spring threshed wheat, they have arranged a deal by which they will take what comes in, dispose of it to the best of their ability, and save for a very small margin, give the farmers all they get out of it. What few cars are coming into their elevators at the present time are being received on these terms. Some of the wheat that has come in up to date has graded No. 2 Northern, but the quantity is so small compared with the vast amount of no grade as to cut a very small figure indeed.

Elevator men expect that much of the wheat still in the stack will not be touched now till fall, when it will be threshed with the new crop. It can be more advantageously disposed of at that time.

It is a sad situation all around, and the lessons of it ought to be pretty thoroughly learned by this time. The elevator companies have learned theirs, and it is safe to assume will never be caught again in a losing operation of just this sort. The farmers, it is to be hoped, will profit by their experience in the same measure.—*Pioneer Press.*

For the privilege of selling pop corn the World's Columbian Exposition expects to get \$217,000.

The Nickel Plate Railway has contracted for 1,000 box cars of 60,000 pounds' capacity, each with air brakes and other modern improvements.



## Fires, Casualties, Etc.

A distillery at Lawrenceburg, Ky., was burned June 17. Loss \$10,000.

Heavy rains recently damaged Drake & Messer's elevator at Metamora, Ill.

Fire destroyed 7,000 acres of grain near Merced, Cal., June 21. Loss \$100,000.

Hay Bros., grain dealers and millers at Listowel, Ont., suffered loss by fire recently.

The elevator of Biell & Petross at St. Mary's, Kau., was burned on the night of July 4.

G. W. Barnard, grain dealer, was instantly killed at his elevator in Oakland City, Ind., July 10.

Armstrong's grain warehouse at Oak River, Man., collapsed recently with 1,200 bushels of wheat.

G. A. Hax & Co., dealers in grain and feed at Baltimore, Md., have suffered loss by fire recently.

George Ruder's brewery at Merrill, Wis., was burned June 12. Loss \$100,000; insurance only \$12,000.

P. Murray Brooks & Co. of Baltimore, Md., suffered a loss of \$1,500 by fire in their hay and feed store July 3.

E. S. W. Drought & Co.'s large hay warehouse at Kansas City, Mo., was burned at night June 25. Loss, \$16,000.

A boiler burst in elevator No. 7 at Montreal, Que., May 31 and the escaping steam scalded engineer Pollette to death.

The elevator at Dubuque, Ia., formerly owned by Gen. C. S. Bentley, was partly destroyed by fire on the night of June 12.

The Harper-Fricke Grain Company of Iantha, Mo., lost \$14,000 by the burning of its elevator recently. Insurance, \$7,000.

A grain house at What Cheer, Ia., collapsed June 20, and 10,000 bushels of oats ran into a creek near by. Part of the grain was saved. Loss, \$800.

Lightning struck the large elevator ten miles west of Joliet, Ill., on July 2. It burned together with 3,000 bushels of grain. Loss, \$25,000; insurance small.

Spink & Co.'s elevator at Washington, Ind., was burned on the evening of July 9 with 2,600 bushels of wheat and 500 barrels of flour. Fully insured.

The floating grain elevator, "St. Nicholas," at Philadelphia, Pa., owned by the Girard Point Elevator Company, was badly damaged by fire June 12. Loss, \$10,000.

M. M. Spangler's malt house at Cleveland, O., was burned June 18 with a large quantity of barley and malt. Loss on building \$10,000; on stock \$60,000; fully insured.

The "Air Line Elevator" at Chicago was badly raked by a passing schooner recently. The slate was torn off the whole length of the side and deep grooves gouged in the wall.

R. C. Jewett, a well known grain dealer of Auburn, Me., while suffering from mental depression hanged himself June 12. He was 70 years of age and had been ill for some time.

A grain elevator built a year ago at Lake Elmo by Drew Bros., millers at St. Paul, Minn., was burned June 24, with \$500 worth of grain and flour. Loss on building and machinery, \$3,000; insurance, \$2,700.

A 125,000-bushel elevator at Grafton, N. D., known as the Minneapolis and Northern Elevator, was burned July 7 during a terrific windstorm. It contained 20,000 bushels of wheat. Loss \$40,000; insurance \$20,000.

Burglars attempted to rob the safe in G. A. Cotharin's elevator at Flint, Mich., on the night of June 16, but for some reason desisted after they had drilled a hole through the iron door and placed the powder and fuse.

The elevator and malt house of the Kentucky Malting Company at Louisville, were burned June 19. Loss on buildings and machinery, \$100,000; insurance, \$88,000; loss on 165,000 bushels malt, etc., in elevator, \$110,000; insurance, \$99,500; loss on stock in malt house, \$2,000; insurance, \$6,000. When discovered the fire had spread wonderfully. Its origin is unknown.

A stroke of lightning ignited the kiln house of the Carden Malting Company at Chicago June 23. The fire that resulted was confined to the kiln house by the city fire department; but the 30,000 bushels of barley in elevator "C" were badly damaged by water. Little damage was done elevators "A" and "B." The electric bolt struck the kiln house immediately under the roof. The flames descended an elevator leg into the seventh and sixth stories, then burst through the roof and were discovered by a policeman who summoned the fire department. Before the fire was gotten under control the flames had worked down the elevator leg to the second

story. The floors were of perforated sheet iron and were so badly warped by the combined action of heat and water that they will have to be replaced. On the floors were 8,000 to 9,000 bushels of barley in process of malting, which were totally ruined. Loss, \$50,000; fully insured.

During a wind and rainstorm at Galva, Ill., June 13, the Rock Island Elevator was blown over so that it rested on some freight cars on the side track. The G. W. Barnett Elevator was unroofed and the water poured in on the 10,000 bushels of stored grain. George Hough's grain elevator was blown down. Two elevators and several cribs owned by Hiram Higgins of West Andross were badly damaged, about 200,000 bushels of oats and corn being blown about.

Two elevators at Durant, Ia., were burned June 26. Early in the morning fire was discovered in the engine room of H. H. Sindt & Co.'s elevator, and could easily have been put out, but as no water could be had immediately, the flames spread and soon enveloped the whole building and the cribs adjoining. Close by stood Frank Haller's elevator, which was soon ignited and completely destroyed with its contents, 8,000 bushels of grain. Mr. Haller's building was 26x48 feet, 1½ stories high, and his loss is \$4,000, with an insurance of \$800 on grain, \$1,000 on elevator and \$1,500 on lumber. Messrs Sindt & Co.'s house contained 7,000 bushels of wheat, 6,500 bushels of corn, 300 bushels of oats, 400 of barley and 200 of rye, on which the loss was \$7,000. The loss on the elevator is \$9,000. Insurance on grain, \$2,500; on elevator, \$7,500. Their building had a complete equipment of machinery for handling and cleaning all kinds of grain. A quantity of cobs and coal was heaped up in the engine room where the fire was first seen and it is thought that spontaneous combustion occurred in this pile of fuel.

## SOUTHERN GRAIN PORTS.

Grain shippers have been slow to recognize the advantages which New Orleans and Galveston have as ports for foreign shipment of grain, but within the past year there has been a lively awakening to an appreciation of the opportunities presented by these ports, so long neglected. The exports of grain from New Orleans since September last have amounted to 18,671,000 bushels, and, with the elevator now being constructed near Gretna, with a capacity of 1,000,000 bushels, the shipments for the coming year will undoubtedly be much greater. At Galveston an elevator of the same capacity is being erected, and so rapid has been the increase in receipts of grain for shipment that preparations are being made to construct another one of the same size. The exports from both of these cities are increasing steadily, and with a little more active co-operation on the part of the railroads entering them the trade can be still further increased. An immediate need is for more grain elevators, as during the past shipping season a large amount of Texas grain could not be handled by the railroads.

## PUBLIC ELEVATOR FOR WINNIPEG.

The prospect seems very good for the establishing of a large public elevator at Winnipeg, says the *Commercial* of that city. When the matter was first talked about last winter, it was thought by some that the Canadian Pacific Railway people would be rather opposed to the enterprise. Any doubts in this direction, however, have now been set at rest, by the letter from the company, stating that a free site will be given, and that the company will give every assistance to the undertaking. This will be reassuring to those who expected the railway people to oppose the enterprise. A committee of the grain exchange now has the matter in hand, with fair prospect of success.

The great need of a public elevator system at Winnipeg was shown last winter. The grain trade of Manitoba was badly crippled all winter, owing to the overtaxed condition of the eastern connections of our railways. It was made evident that the export grain trade of the country would have to be done on a new and improved system. Instead of straggling car lots, shipments eastward would have to be made in straight export lots of single grades. An elevator at Winnipeg, it was shown, was necessary to facilitate the handling of our grain crop for export. Had such facilities existed here last winter, the trying difficulties which beset the grain men on all sides, would have been very considerably modified. The five elevators now at Winnipeg are all required for milling and other local and private purposes. What is needed is a cleaning and handling elevator, with facilities for rapidly handling large quantities of grain. Such an elevator would relieve the grain men of the necessity of paying freight on tons of dirt shipped eastward in wheat and would thus improve the reputation of our wheat abroad. It would also enable grain shippers to collect their wheat here in car lots, from their various country, buying points, and make it up in export lots of straight grades. This mode of shipping in large lots of single grades, has become an absolute necessity in the export grain trade. All the railways converge here, hence this is the most convenient point to make up export lots.

"Missouri meerschaum" is made by the corn cob pipe factory at Washington, Mo.

## PRESS COMMENT.

### COMPUTING YIELD OF WHEAT.

It would be impossible to conceive anything more misleading than an attempt to compute the world's yield of wheat in advance. Last year's false statistics of the wheat crop of Europe alone are sufficient to demonstrate the absurdity of attempting to arrive at even an approximate estimate of the aggregate of the world's wheat supplies either before or after harvest. No one can tell what the actual yield of wheat is in Russia, India, the United States and Canada and the South American states, until the stuff is actually shipped out of those countries.—*Montreal Trade Bulletin*.

### WILL BE THE LOUDEST MOURNERS.

The elevator pool at Buffalo is notoriously strong and grasping, and its policy appears to be to freeze out or absorb all competing elevators as fast as they are established. The plan, the friends of the canal charge, is for the railroads and elevators, by their combined efforts, to deprive the canal of business, and, through legislative influence prevent the improvement of which even now it stands in sad need, until finally matters are brought to such a pass that a move to abandon and fill it up will prevail. That having been done, it is anticipated that rail rates east from Buffalo will be maintained at whatever figure the roads see fit to impose. If the canal is being made the victim of the cupidity of the elevator pool and the railroad owners of New York, those who sit still now and permit the suppressing process to go on will be among the loudest of mourners when the canal is destroyed and its wholesome restraint is removed. The West is interested in this fight and should be heard from.—*Northwestern Miller*.

## RICE IMPORTS AND EXPORTS.

Our imports of rice, rice flour, rice meal and broken rice in the eleven months ending with May were 121,899,435 pounds, valued at \$2,295,556; against 172,100,785 pounds, valued at \$3,511,344, in the corresponding period of 1890-91. Of imported rice we exported in the eleven months 9,987,683 pounds, valued at \$197,505; against 7,233,162 pounds, valued at \$148,082, in the eleven months ending May, 1891.

We imported in addition from the Hawaiian Islands, free of duty, 6,869,100 pounds rice, valued at \$339,876; against 7,840,900 pounds, valued at \$415,630, in the ten months ending with May, 1891. Of this duty-free rice we exported in the eleven months ending with May 14,500 pounds, against 5,287 pounds in the corresponding period of 1890-91.

## VALUABLE BOOKS FOR GRAIN DEALERS.

The following standard works will be sent, postage paid, on receipt of prices given:

ROBINSON'S TELEGRAPH CIPHER.—The publishers have recently revised this excellent work, and we are now prepared to supply the trade. Cloth binding, \$1.50; leather, .....\$2.00.

CLARK'S VEST-POCKET GRAIN TABLES.—A very useful and handy little book for grain buyers; to be used in reducing to bushels any quantity of grain or seeds up to 100,000 bushels. Size 2½ by 8½ inches, 16 pages. Leatherette, .....75c. Leather, .....\$1.00.

GRAIN DEALERS' AND SHIPPERS' GAZETTEER.—A new publication containing the grain inspection rules for the states of Illinois, Wisconsin, Minnesota, Michigan, Ohio and Missouri, and a complete list of the names of grain dealers and shippers on twenty-five railroads which penetrate the principal grain growing territory of the country. The names were collected recently by the aid of the railroad companies, so the names of no retired firms are given, making it reliable and by far the best book of the kind published. It is well bound and contains 370 pages. Price, .....\$5.00.

CLARK'S GRAIN TABLES.—This work is published in several different forms, for use in different lines of business. In these tables pounds are reduced to bushels, so that a buyer can quickly determine the correct number of bushels in a load without doing any figuring. Their use effects a saving every day of more than time enough to pay for them. The edition intended principally for reducing team scale weights to bushels contains nine tables, and is bound in paper. Price 50 cents. This will be found invaluable to country buyers. A new edition, intended for shippers and commission merchants, reduces any quantity up to 64,000 pounds to bushels. It contains sixteen tables, and is neatly bound in leatherette. Price, .....\$1.50.

For any of the above, address

MITCHELL BROS. Co., 184 and 186 Dearborn street, Chicago, Ill.



PHILADELPHIA GRADES.

The grades of grain established by the committee on grain of the Commercial Exchange of Philadelphia, in accordance with the grain rules, May 11, 1892, are as follows:

WINTER WHEAT.

EXTRA WHITE OR EXTRA WHITE MICHIGAN—shall be sound, dry, plump, well cleaned white winter wheat, and in every respect of choice quality.

No. 1 WHITE OR No. 1 WHITE MICHIGAN—shall be sound, dry, reasonably clean white winter wheat of good quality, but not choice.

No. 2 WHITE—shall include all sound, dry white winter wheat unfit to grade No. 1.

No. 1. PENNSYLVANIA OR LONG BERRIED RED—shall be sound, dry, reasonably clean, long-berried red winter wheat of good quality, but not choice.

No. 2 PENNSYLVANIA RED—shall be sound, dry, reasonably clean red winter wheat.

No. 2 DELAWARE—shall be sound, dry, reasonably clean amber winter wheat.

No. 2 RED—shall be sound, dry, reasonably clean red winter wheat, and shall not contain over 10 per cent. of white wheat.

No. 2 SOUTHERN RED—shall include all red winter wheat, equal to or better than No. 2 Red in quality, but which shall contain too great a proportion of *garlic* to be admitted in the higher grades.

No. 3 RED—shall include dry, inferior or shrunken, but sound winter wheat, only fair in quality and cleanliness.

No. 4 RED—shall include dry, inferior or shrunken winter wheat, below the grade of No. 3.

MIXED WINTER—shall be equal in quality to No. 2 Red, but containing over 10 per cent. of white wheat.

STEAMER No. 1, PENNSYLVANIA, OR LONG-BERRIED RED—shall include all winter wheat not inferior to the grade of No. 1 Pennsylvania in quality, but in condition may be slightly soft or damp, but must be cool, and, in the judgment of the inspector, suitable for steamer shipment.

STEAMER No. 2 DELAWARE—shall include all winter wheat not inferior to the grade of No. 2 Delaware in quality, but the condition to be the same as Steamer No. 1 Pennsylvania.

STEAMER No. 2 RED—shall include all winter wheat not inferior to the grade of No. 2 Red in quality, but the condition to be the same as Steamer No. 1 Pennsylvania.

STEAMER No. 3 RED—shall include all winter wheat not inferior to the grade of No. 3 red in quality, but the condition to be the same as Steamer No. 1 Pennsylvania.

REJECTED WHEAT—shall include all winter wheat of quality inferior to No. 4, but suitable for warehousing.

No GRADE WHEAT—shall include all very damp, warm, or damaged wheat, unfit for warehousing.

UNGRADED WHEAT—shall include any wheat not covered by the above grades.

SPRING WHEAT.

No. 1 HARD SPRING WHEAT—No. 1 Hard Spring Wheat must be sound, bright and well cleaned, and must be composed mostly of Hard Scotch Fife and weigh not less than 58 pounds to the measured bushel.

No. 1 NORTHERN SPRING WHEAT—No. 1 Northern Spring Wheat must be sound and well cleaned and must be composed of the hard and soft varieties of spring wheat.

NOTE—It is to be understood that the minimum test weight of this grade shall be not less than 57 pounds to the measured bushel, and must contain not less than about 50 per cent. of the hard varieties of spring wheat.

No. 2 NORTHERN SPRING WHEAT—No. 2 Northern Spring Wheat must be sound, reasonably clean and of good milling quality.

NOTE—This grade to include all wheat not suitable for the higher grades, and to weigh not less than 56 pounds to the measured bushel.

No. 3 SPRING WHEAT—No. 3 Spring Wheat shall comprise all inferior, shrunken, or dirty spring wheat weighing not less than 54 pounds to the measured bushel.

REJECTED SPRING WHEAT—Rejected Spring Wheat shall include all spring wheat that is grown, badly bleached, or for any cause unfit for No. 3 Wheat.

NOTE—Wheat containing admixture of "rice" or "goose" wheat will in no case be graded higher than rejected.

Spring wheat arriving from "Duluth," "Chicago" and "Milwaukee," when accompanied by the inspector's certificate, shall be graded accordingly, and stored separate when desired.

CORN.

No. 1 YELLOW—shall be yellow, sound, dry, plump, and well cleaned.

No. 2 YELLOW—shall be seven-eighths yellow, sound, dry, and reasonably clean.

No. 1 WHITE—shall be sound, dry, plump, and well cleaned, and may contain a limited number of yellow or straw-colored grains.

No. 2 WHITE—shall be sound, dry, and reasonably clean, but in berry and color may be slightly inferior to No. 1 White Corn.

No. 2 MIXED—shall be sound, dry, and reasonably clean.

STEAMER No. 2—shall include corn of the above named grades in quality; in condition it may be slightly soft or damp, but must be cool, and in the judgment of the inspector suitable for steamer shipment.

No. 3—shall include all corn, soft, damp, slightly

musty, dirty, not damaged, but inferior in quality to Steamer Corn.

No. 4—shall include all corn, inferior to No. 3, but suitable for warehousing.

No GRADE—shall include all warm or damaged corn, unfit for warehousing.

NOTE.—On all inspections of corn for local trade the inspector is required to prefix the words "High" or "Low Mixed" on his inspections.

OATS.

No. 1 WHITE CLIPPED OATS—shall be bright, sound, well cleaned, and reasonably free from other grains, weighing not less than 37 pounds per measured bushel.

No. 2 WHITE CLIPPED OATS—shall be sound, well cleaned, and reasonably free from other grains, but may be slightly stained, weighing not less than 34 pounds to the measured bushel.

No. 3 WHITE CLIPPED OATS—shall be at least three-quarters white, reasonably sound, reasonably clean, and reasonably free from other grains, weighing not less than 30 pounds to the measured bushel.

EXTRA WHITE—shall be bright, sound, reasonably clean, and free from other grains, weighing not less than 32 pounds per measured bushel.

No. 1 WHITE—must be sound, bright, and reasonably clean, weighing not less than 31 pounds per measured bushel.

No. 2 WHITE—must be sound white oats, reasonably clean, and reasonably free from other grains, and weighing not less than 27 pounds per measured bushel. Occasional grains of black oats shall not deprive them of this grade.

No. 3 WHITE—shall not be less than three-quarters white, but not equal to No. 2 white in other respects.

No. 1 MIXED—must be sound and reasonably clean, not less than two-thirds white, and weighing not less than 31 pounds per measured bushel.

No. 2 MIXED—must be sound, reasonably clean, and reasonably free from other grains, and weighing not less than 27 pounds per measured bushel.

No. 3 MIXED—all merchantable oats unfit for No. 2 shall be graded No. 3.

REJECTED—shall include all oats inferior to No. 3, but suitable for warehousing.

No GRADE—shall include all warm or damaged oats unfit for warehousing.

UNGRADED—shall include any oats not covered by the above grades.

RYE.

No. 1 PENNSYLVANIA RYE—shall be sound, plump, and well cleaned.

No. 2 PENNSYLVANIA RYE—shall be sound, reasonably clean, and reasonably free from other grains.

No. 1 WESTERN RYE—to be sound and well cleaned and equal to No. 1 Milwaukee.

No. 2 WESTERN RYE—to be sound and reasonably clean.

REJECTED—will include such rye as is unsound, dirty, or from any other cause will not grade No. 2.

BRAN.

No. 1 WINTER WHEAT BRAN—must be fresh, coarse, clean, and free from screenings.

No. 2 WINTER WHEAT BRAN—to include such sound, clean, fresh bran as will not grade No. 1.

No. 1 SPRING WHEAT BRAN—must be sound, clean, and free from screenings and oat hulls.

No. 2 SPRING WHEAT BRAN—must be reasonably clean, will include such sound spring wheat bran as will not grade No. 1.

REJECTED—will include such bran as is unsound, dirty, or from any other cause will not grade No. 2.

TRANSFERRING GRAIN BY COMPRESSED AIR.

A company is being formed in London to demonstrate the practicability of using compressed air as an agent in the transferring of large quantities of cereals from a vessel or a car to the warehouse, or from one carrier to another, and to do it with great economy of labor. The apparatus by which the air is generated may be located on a dock or elsewhere, and the grain, during its transportation, is automatically weighed. A plant erected at Birmingham, England, and equipped with the compressed air system, was recently inspected by a large number of millers and representatives of grain warehouses and dock companies. With tubes of various dimensions it has a capacity of from 25 to 60 tons per hour.

The principal feature of the system lies in the peculiar shaped nozzles through which the grain is sucked and forced, so to speak, at an enormous rate. On the occasion in question, the appliance was operating on maize and barley, which were lifted 40 feet (under a pressure of 40 pounds), and shot into a bin at that height. From here it descended into a weighing device. The engineer in charge of the plant states that the cost of unloading grain cargoes by this method is about four cents a ton, and that the company guarantees the expense of working not to exceed six cents a ton, which is about one-half of the cost with existing elevator systems at that port.

Five times as much wheat was marketed by Manitoba farmers in June as in June last year. The growers lost heavily by holding over the winter on account of damage in stack and fall in price.

SEED EXPORTS AND IMPORTS.

The exports of seeds in May were 32,486 bushels of flaxseed, 81,393 pounds of clover, 772,293 pounds timothy, and 608,758 pounds cottonseed, against 5,576 bushels of flaxseed, 824,615 pounds clover, 344,462 pounds timothy and 126,280 pounds cottonseed in May, 1891.

In the eleven months ending with May we exported 3,603,102 bushels flaxseed, valued at \$3,902,591; 19,530,571 pounds of clover, valued at \$1,638,391; 10,239,299 pounds timothy, valued at \$378,932, and 11,850,341 pounds cottonseed, valued at \$84,929; compared with 112,615 bushels flaxseed, valued at \$147,406; 20,374,168 pounds clover valued at \$1,545,321; 8,609,146 pounds timothy, valued at \$364,866, and 9,986,694 pounds cottonseed, valued at \$83,421, in the corresponding period of 1890-91.

No flaxseed was imported in May, against 57,912 bushels the preceding May; and during the eleven months ending with May, 251,116 bushels valued at \$278,407 were imported, compared with 1,503,432 bushels valued at \$1,650,035, during the corresponding period of 1890-91.

So large was the last crop of flaxseed that the market price declined until checked by the export demand that ensued. Imports ceased and the exportation swelled to 3,600,000 bushels, whereas none was exported a few years ago. An increased export of oil cake and oil cake meal also took place; nearly nine million dollars worth was sent abroad during the eleven months ending with May, against \$6,872,000 worth in the corresponding period of 1890-91.

Miscellaneous \* Notices.

HOW TO MIX AND MARKET.

Any one who thoroughly understands how to mix and market all kinds and grades of grain may learn of something to his advantage by addressing

X. Y. Z, care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

FOR RENT.

Large warehouse and feed mill for rent. Very conveniently arranged for business and excellent location. To a good party inducements will be offered. Apply to RALSTON R. HOOPES, Westchester, Chester Co., Pa.

POSITION WANTED.

A position wanted in a grain elevator where a reliable man is needed. Ten years' experience in the running of elevator machinery and the handling, grading and mixing of grain. Fully competent to take entire charge. Best reference as to character and ability. Address

M. S, care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

SAMPLE ENVELOPES.

For mailing samples of grain, seeds, wool, feed, etc. Safest made.

2 oz. size,	3x5	.....	\$	80	cents per 100
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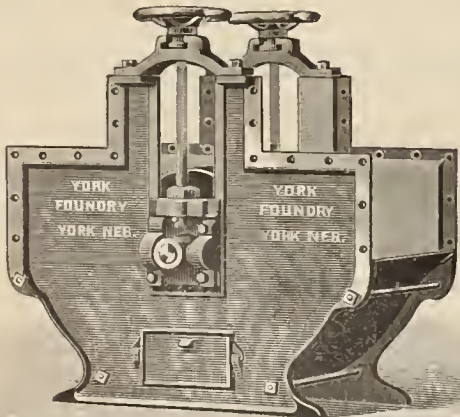
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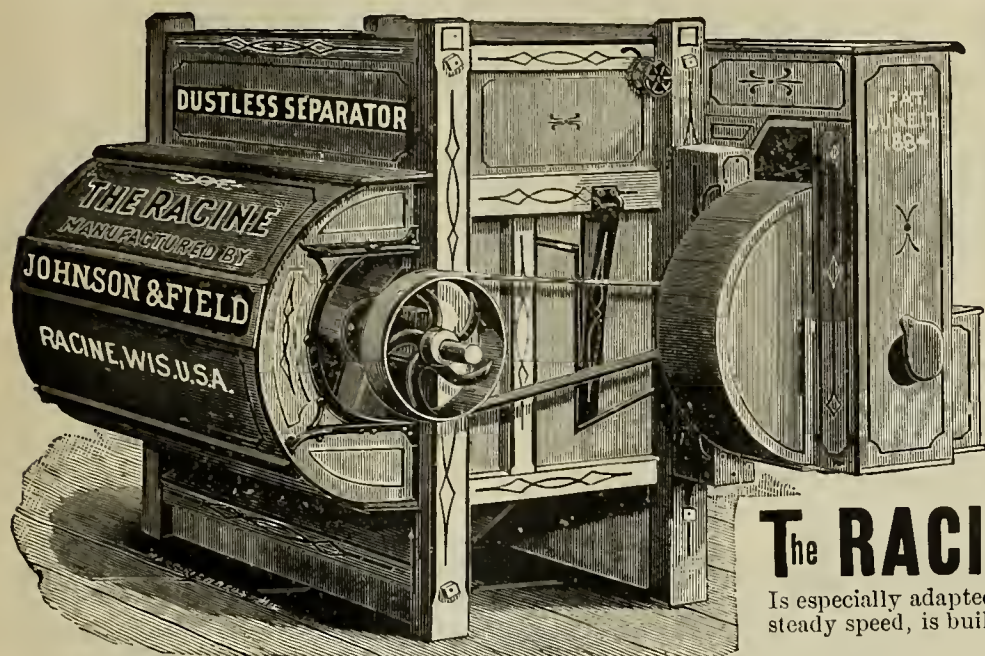
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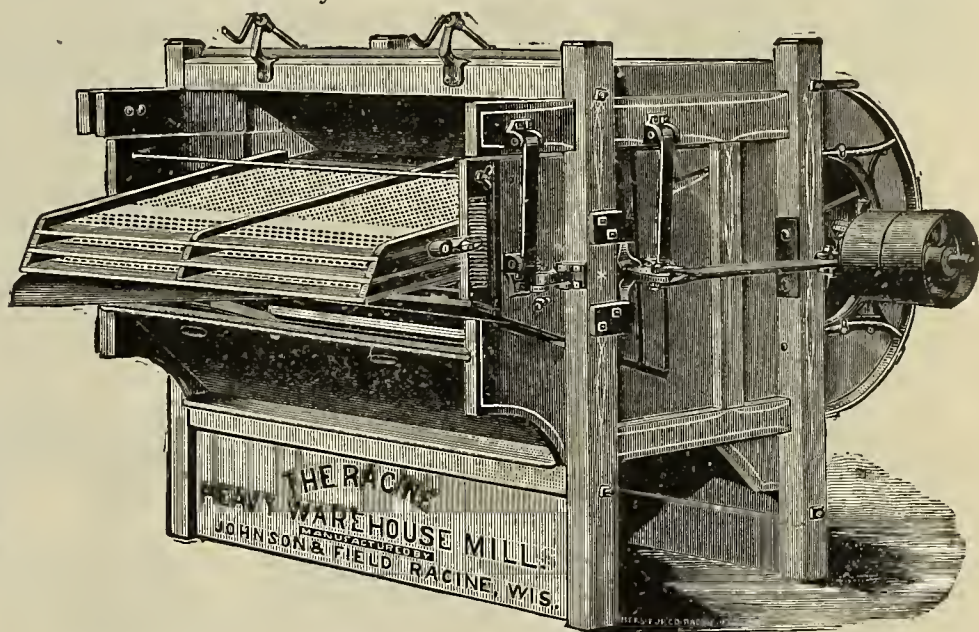
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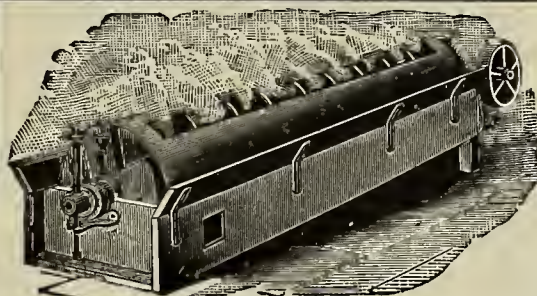
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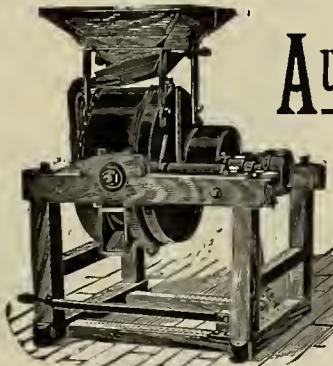


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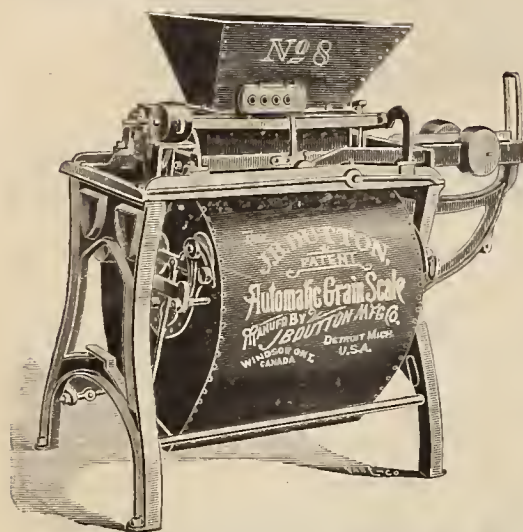
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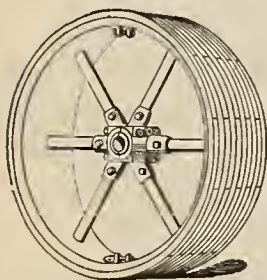
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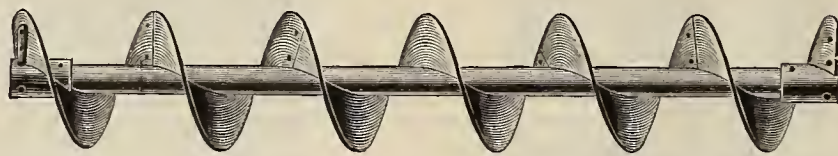


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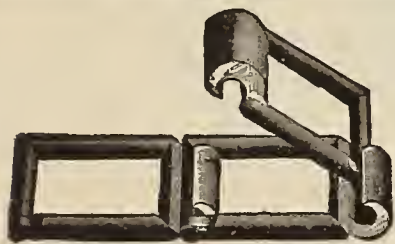
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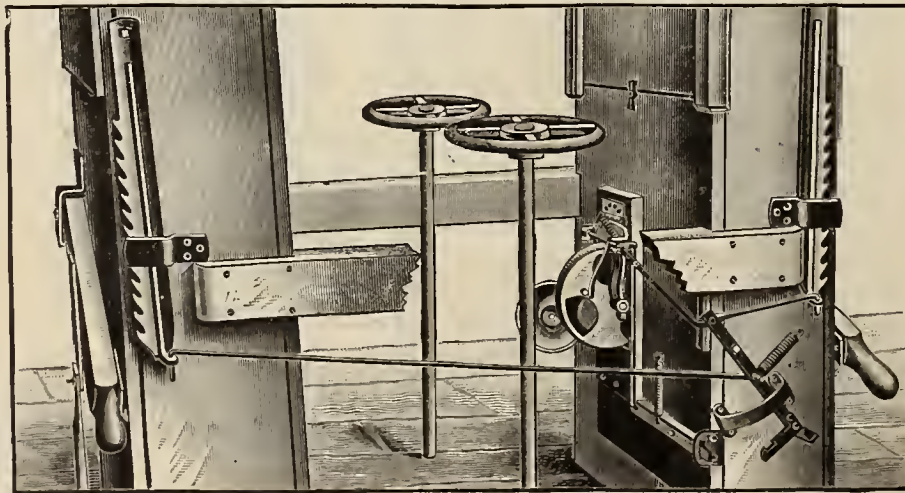
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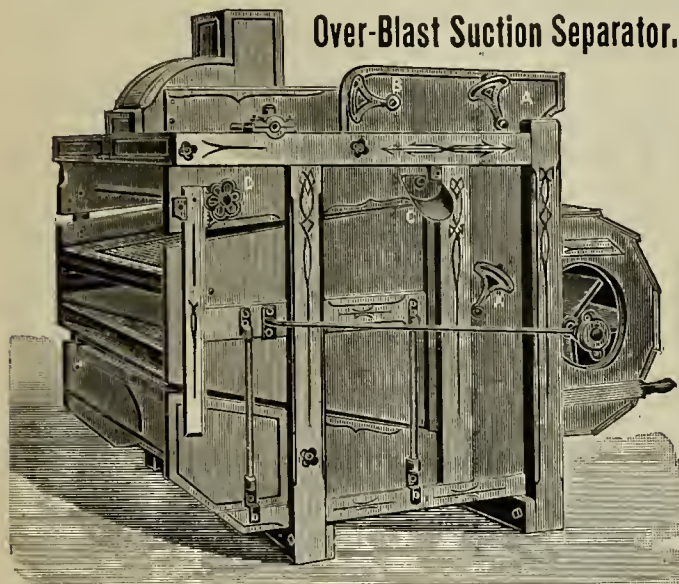
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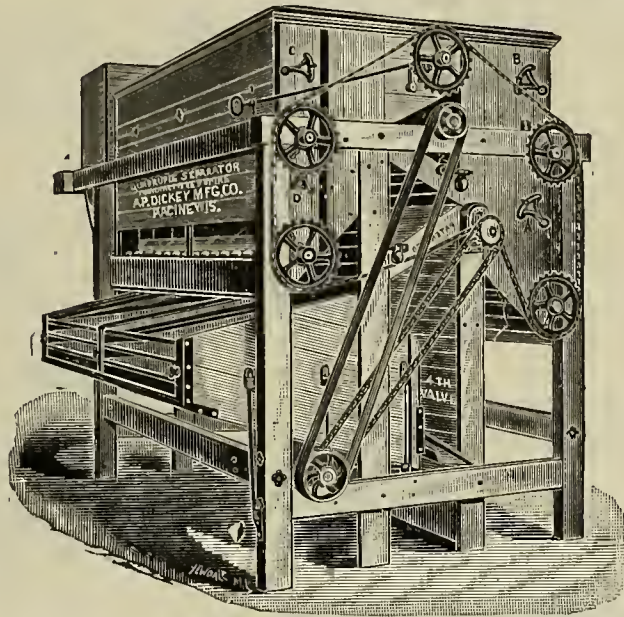
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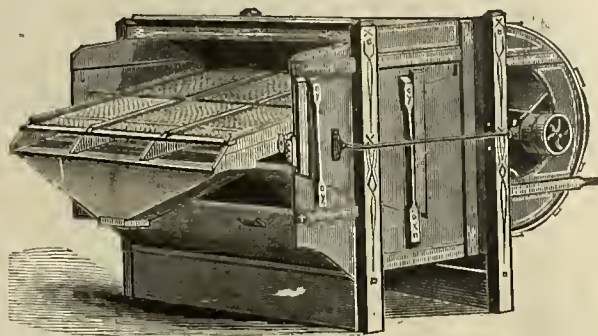
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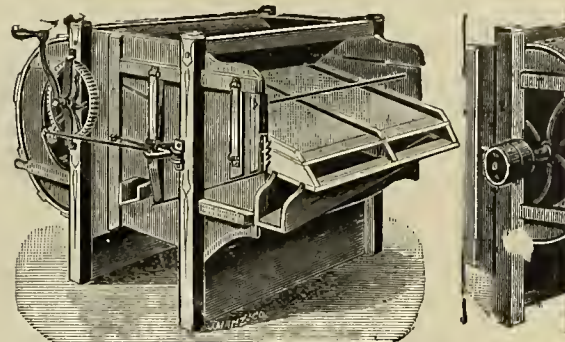
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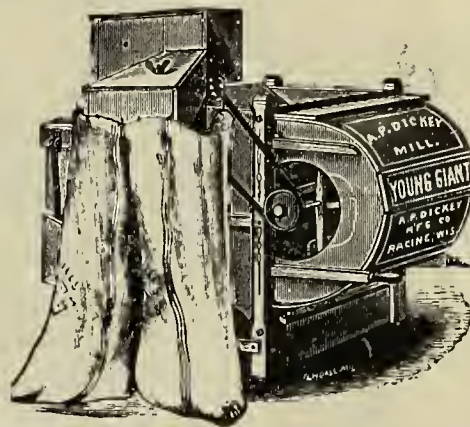
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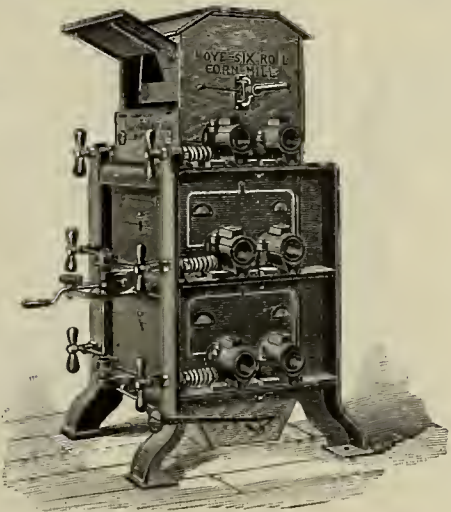


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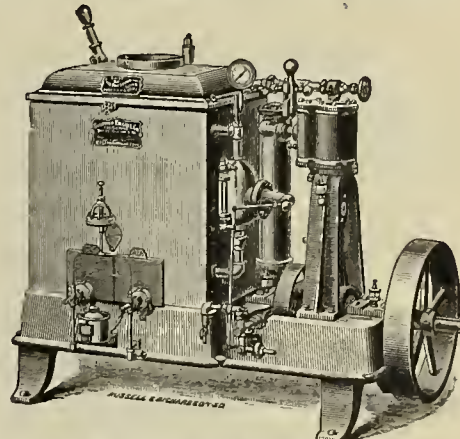
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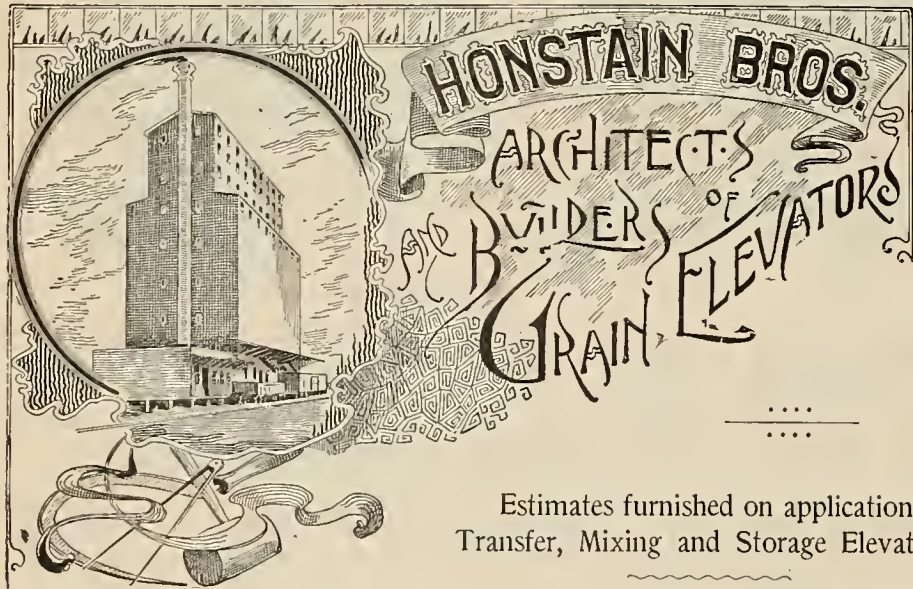
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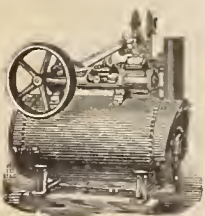
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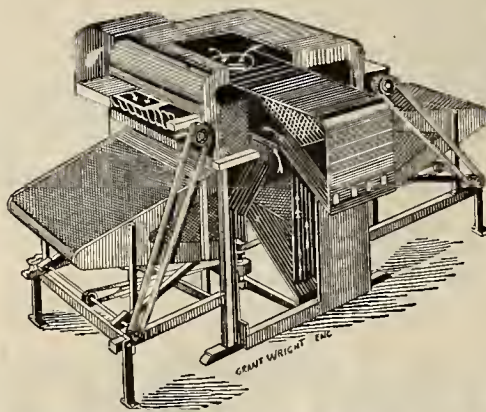
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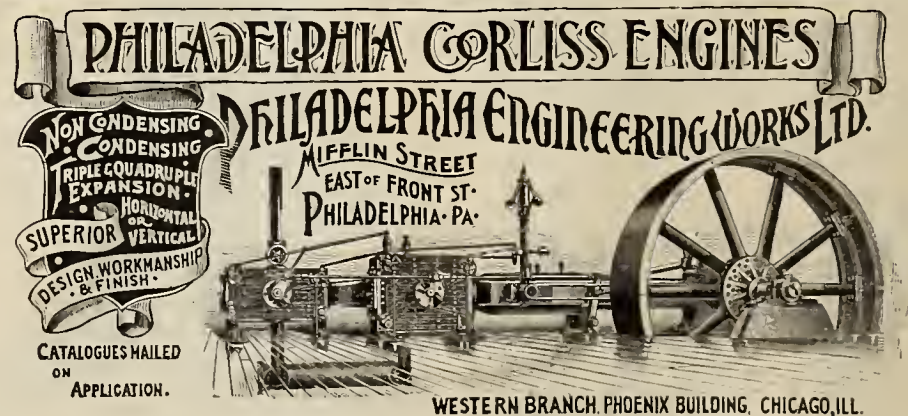
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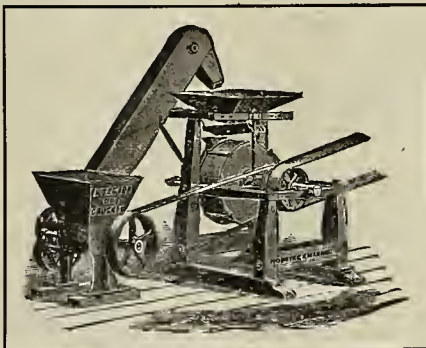
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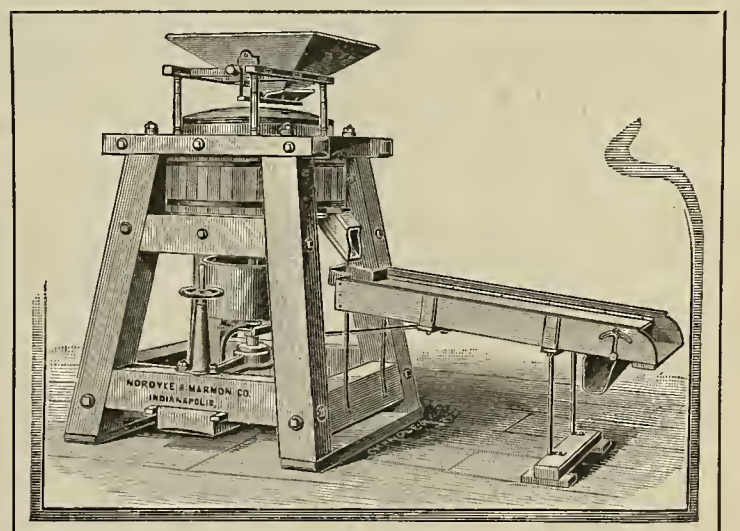
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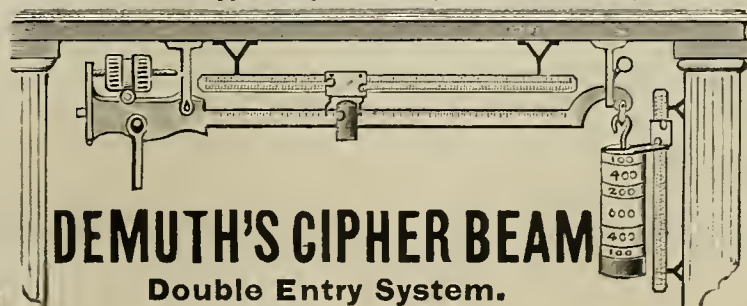
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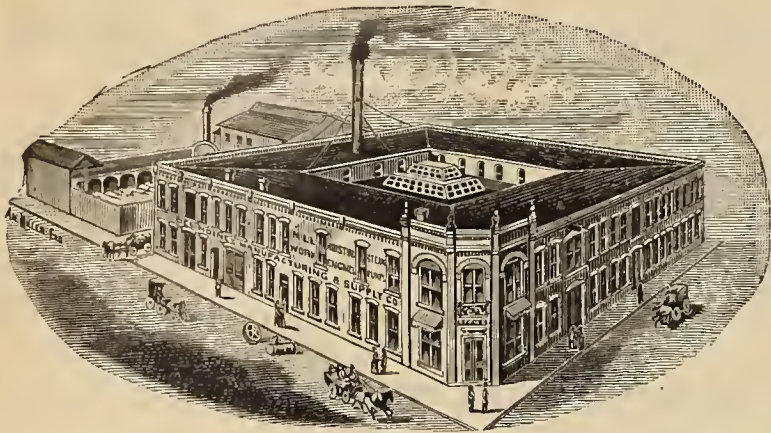
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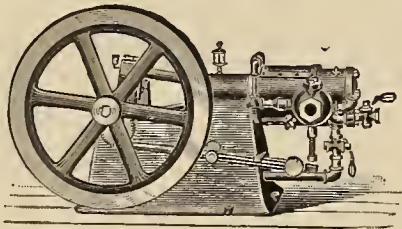
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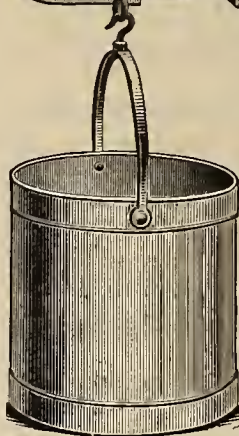
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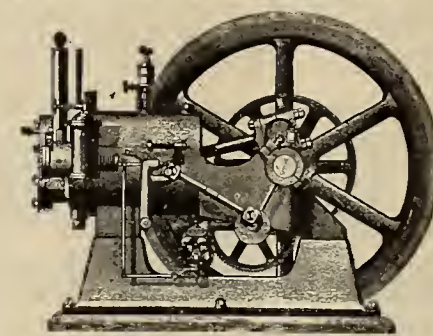
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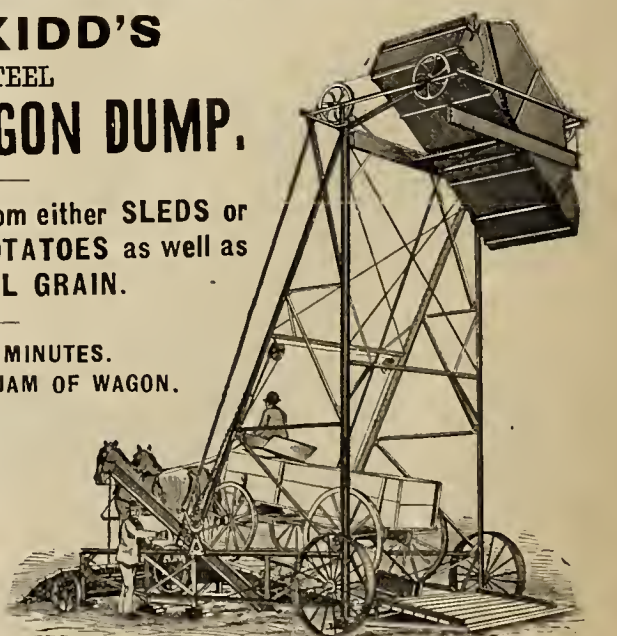
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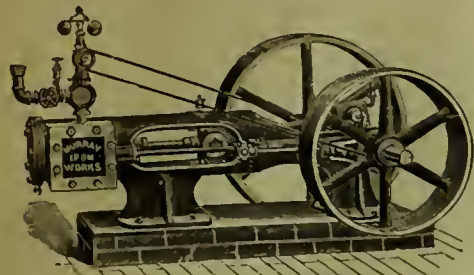


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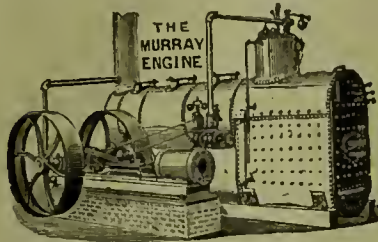
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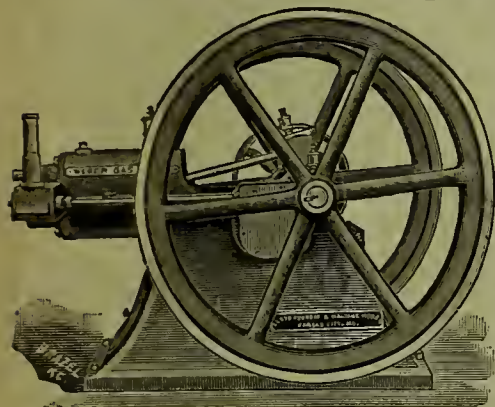
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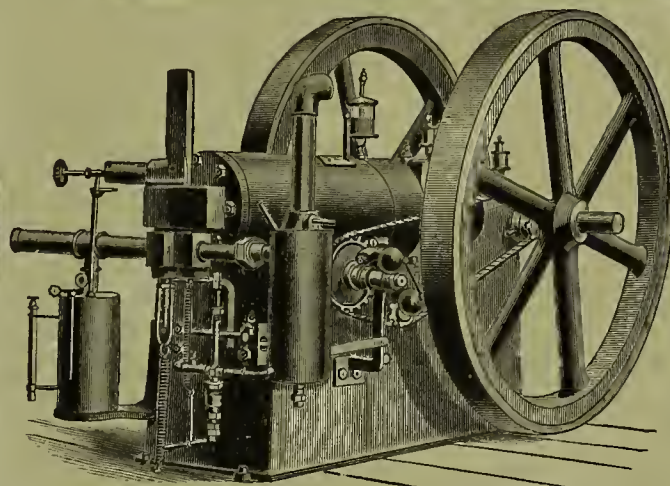
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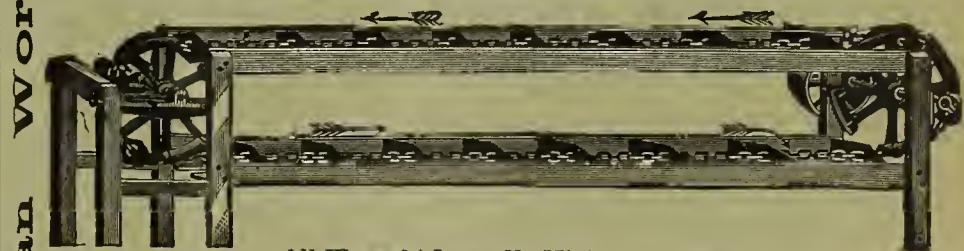
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from  
5,000 to 2,000,000  
Bushels.

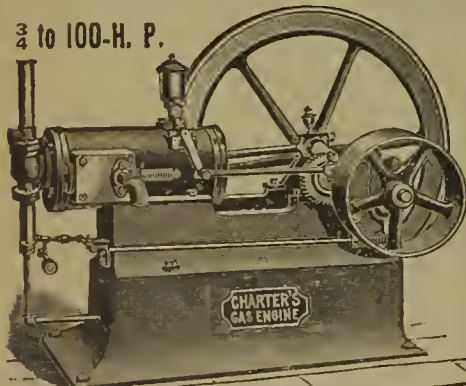
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The Pioneer Engine that Used no Gas.

Started at the Head and has Always Remained There.

Is To-Day without a Peer, either as Gasoline or using Manufactured or Natural Gas.

No Boiler! No Fire! No Steam! No Coal! No Ashes! No Gauges! No Engineer! No Danger!



Reliability. Economy. Simplicity. Safety.  
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GRAIN ELEVATOR.  
Engine was Set Up and Started by our printed  
Directions.

Simpson & Fehring, Grain and Seed,  
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Gentlemen:—We have used our No. 1 Charter Gas Engine over two years. It gives good satisfaction. Have not paid out a cent for repairs.

It takes about 5 gallons gasoline to run our elevator per day.

We have two sets of elevators in our elevator, (size of our cups is 9x5 1/2), and this little engine does the work O. K.

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Respectfully yours,  
SIMPSON & FEHRING

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**COMPLETE EQUIPMENTS FOR ELEVATORS AND SPECIAL PLANTS FOR HANDLING GRAIN AND OTHER MATERIALS.**

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We refer to any of the following for whom we have constructed plants:

Chicago & Grand Trunk R. R. Transfer, Elsdon, Ill., capacity 100 cars per day.  
W. P. Harvey & Co., Kankakee, Ill., 125,000 bushels.  
Fitchburg Railway, Boston, Mass., at Rotterdam Junction, N. Y., 450,000 bushels.  
Middle Division Elevator Co., Chicago, Ill., transfer capacity, 30 cars per day.  
Chas. Counselman, Chicago, Ill., 150,000 bushels.  
A. C. Davis & Co., Horton, Kan., 120,000 bushels.  
Dallas Elevator Co., Dallas, Texas, 750,000 bushels.  
North Texas Mill and Elevator Co., McKinney, Texas, 150,000 bushels.  
Columbia Elevator Co., Columbia, Tenn., 125,000 bushels.  
West Chicago Street Railway Co., 150,000 bushels.  
Ogdenburg Terminal Co., Ogdenburg, N. Y., 1,000,000 bushels.  
Cockrell Grain & Commission Co., Dallas, Texas, 4 elevators

**OVER 35,000 SOLD!**

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